Inspection and Enforcement Workshop

September 11, 2013

BLM Oil and Gas Requirements

Eastern Montana Dakotas District

North Dakota Field Office and Miles City Field Office

Agenda

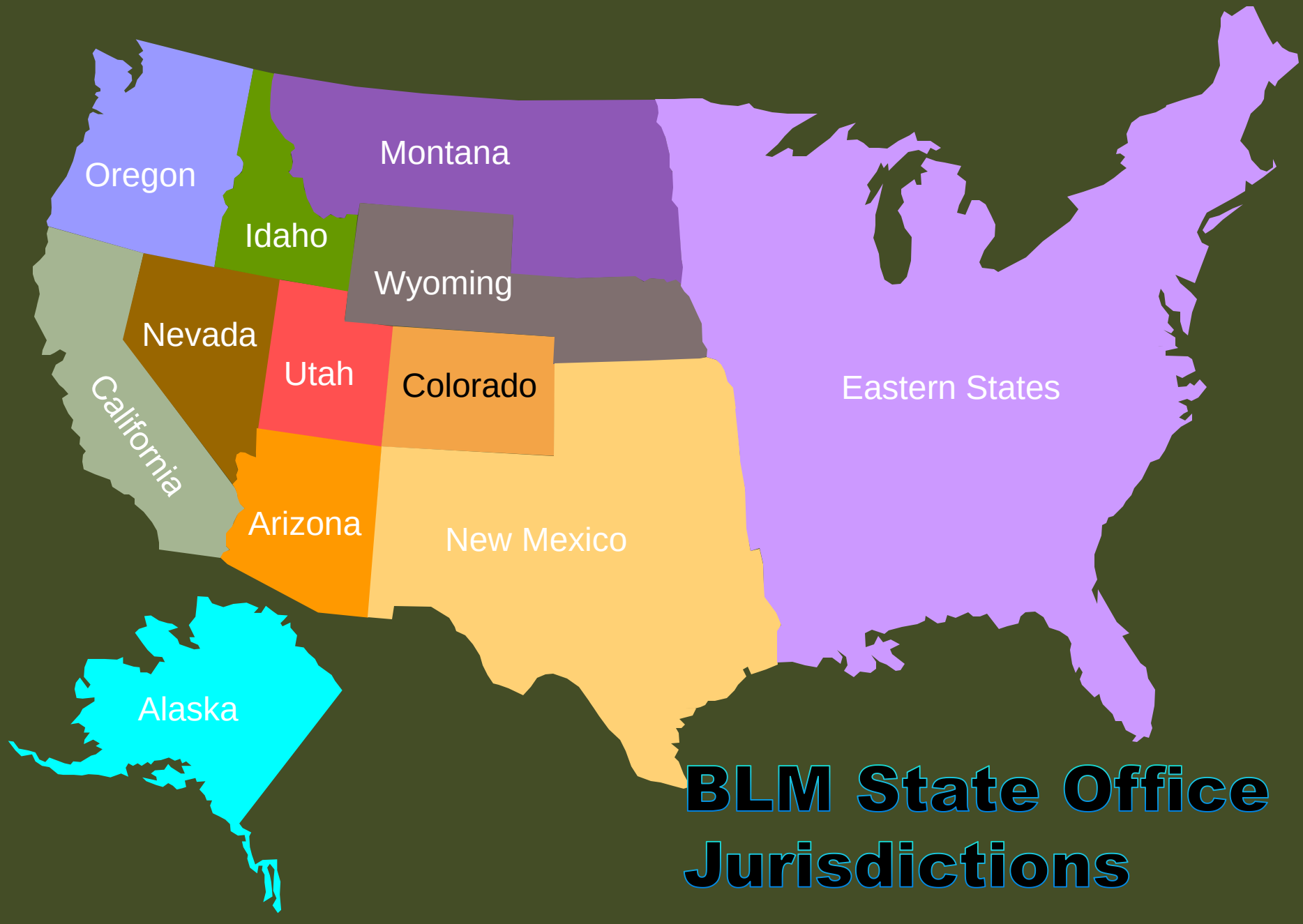
- **Workshop Objectives**
- **BLM jurisdiction and structure**
- **Laws, regulations, Orders, NTLs:**
  - Onshore Order 3: Site Security
  - Onshore Order 4: Oil Measurement
  - Onshore Order 5: Gas Measurement
  - Montana NTL 2007-1: Electronic Flow Computers
  - Point of Measurement, Beneficial Use, Commingling
- **OGOR Reporting Requirements**

Workshop Objectives

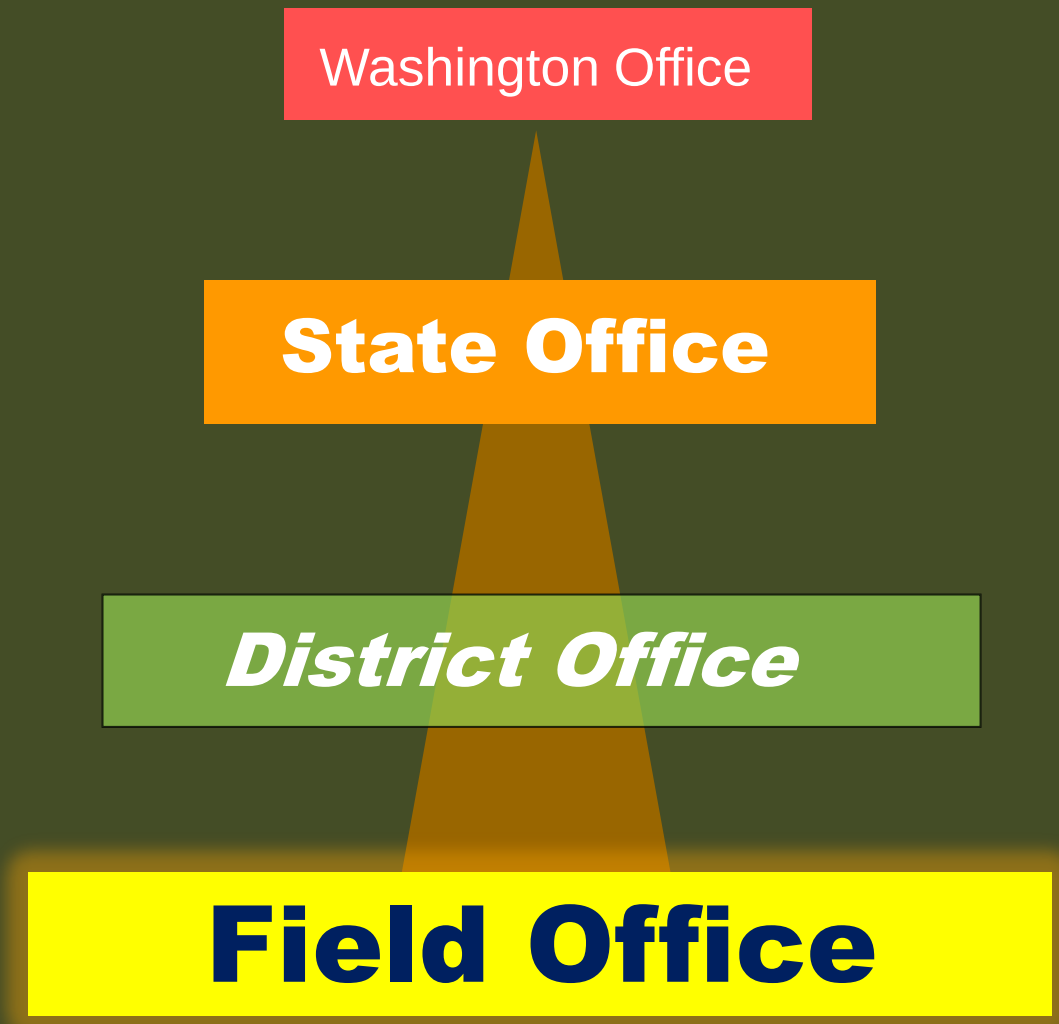
- Provide copies of regulations, handbooks, IMs
- Distinguish minimum requirements
- Highlight areas of concern
- Clearly define expectations
- Identify Points-of-Contact

Oil and Gas from Federal Land

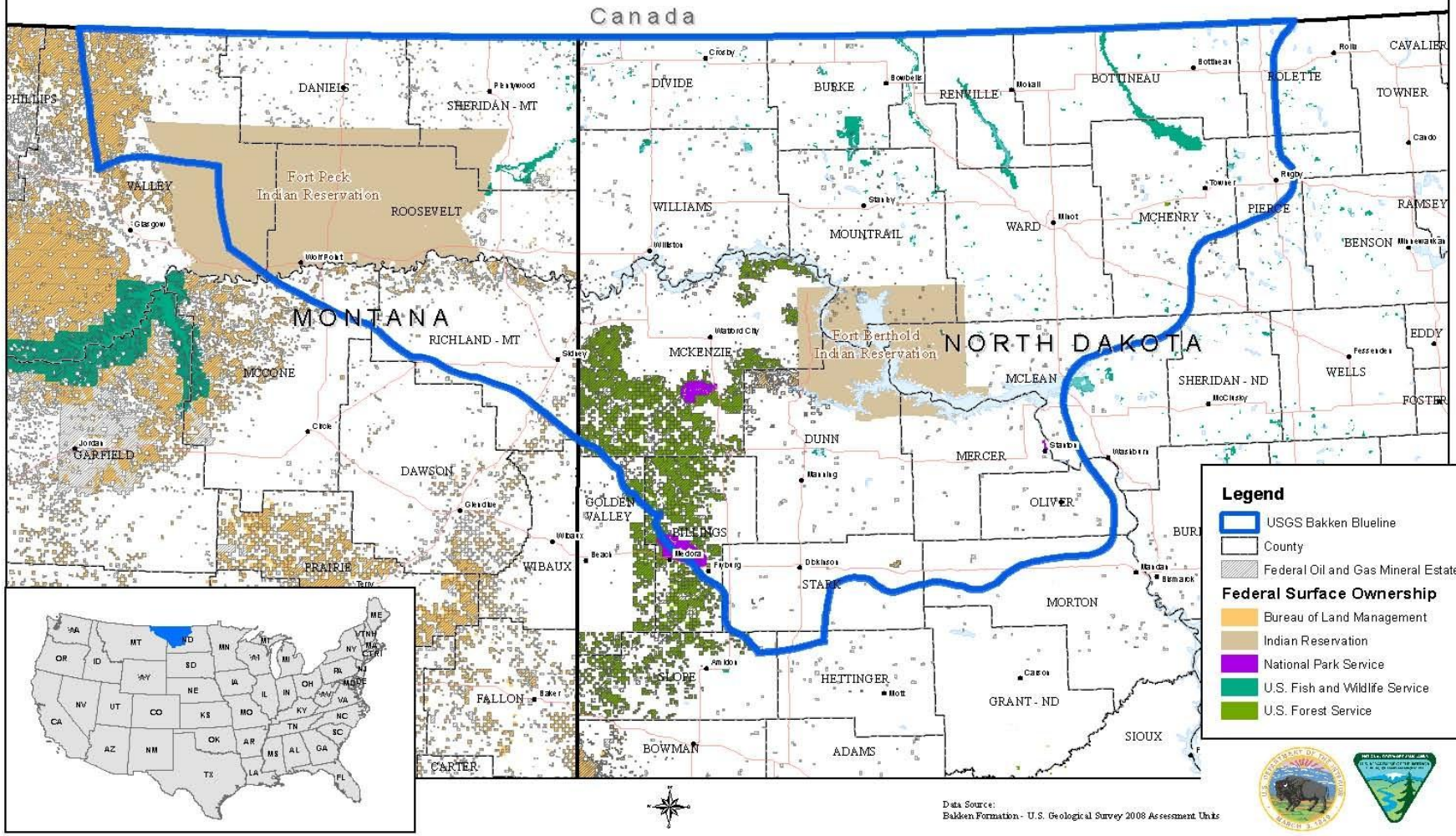
- 23,000 producible oil and gas leases
- 12.3 million acres of producible oil and gas leases
- 77,000 wells
- 6% of oil; 14% of gas
- Oil and gas royalty (onshore): ~$3 billion/yr


Oregon
Montana
Idaho
Wyoming
Nevada
Utah
Colorado
California
Arizona
New Mexico
Eastern States
Alaska
BLM State Office Jurisdictions

BLM Hierarchy



Federal Land Status – Bakken Formation



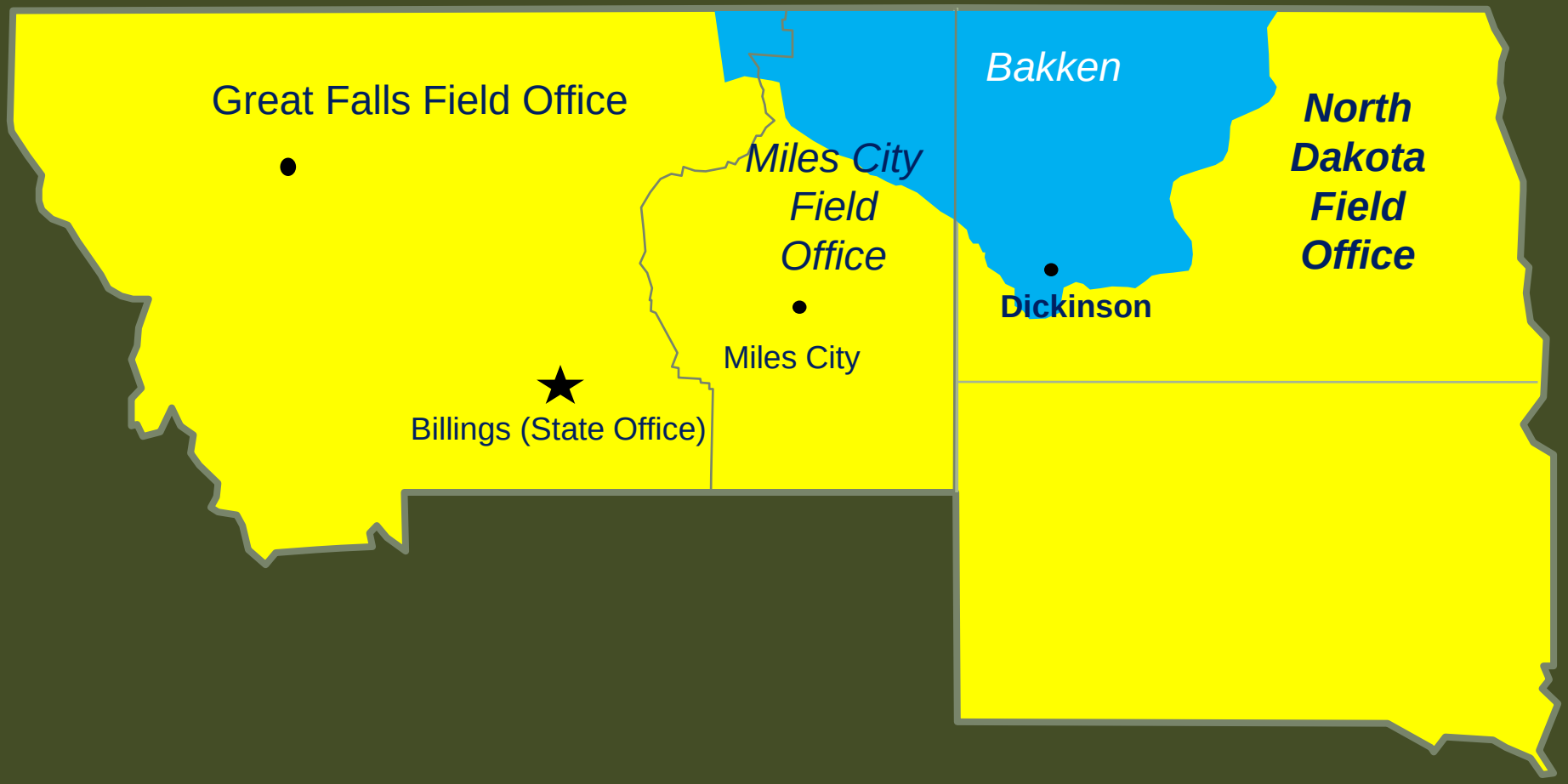
Data Source:
Bakken Formation - U.S. Geological Survey 2008 Assessment Units

No warranty is made by the BLM as to the accuracy, reliability, or completeness of this data for individual use or aggregate use with other data.

U.S. DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT
MONTANA/DAKOTAS

February 14, 2013

Montana State Office Jurisdiction



Law – Federal Oil and Gas Royalty Management Act of 1982 (FOGRMA)

Regulation – 43 CFR 3162.7-2 (oil), -3 (gas)

Onshore Order 3 (1989) – Site Security:
Site facility diagrams, valve sealing

Onshore Order 4 (1989)– Oil Measurement:
Tank gauging, LACT requirements

Onshore Order 5 (1989) – Gas Measurement:
Orifice plates and chart recorders

NTL MT 2007-1 (2007): EFC requirements

NTL-4A (1980): Beneficial use, venting and flaring, avoidable and unavoidable loss

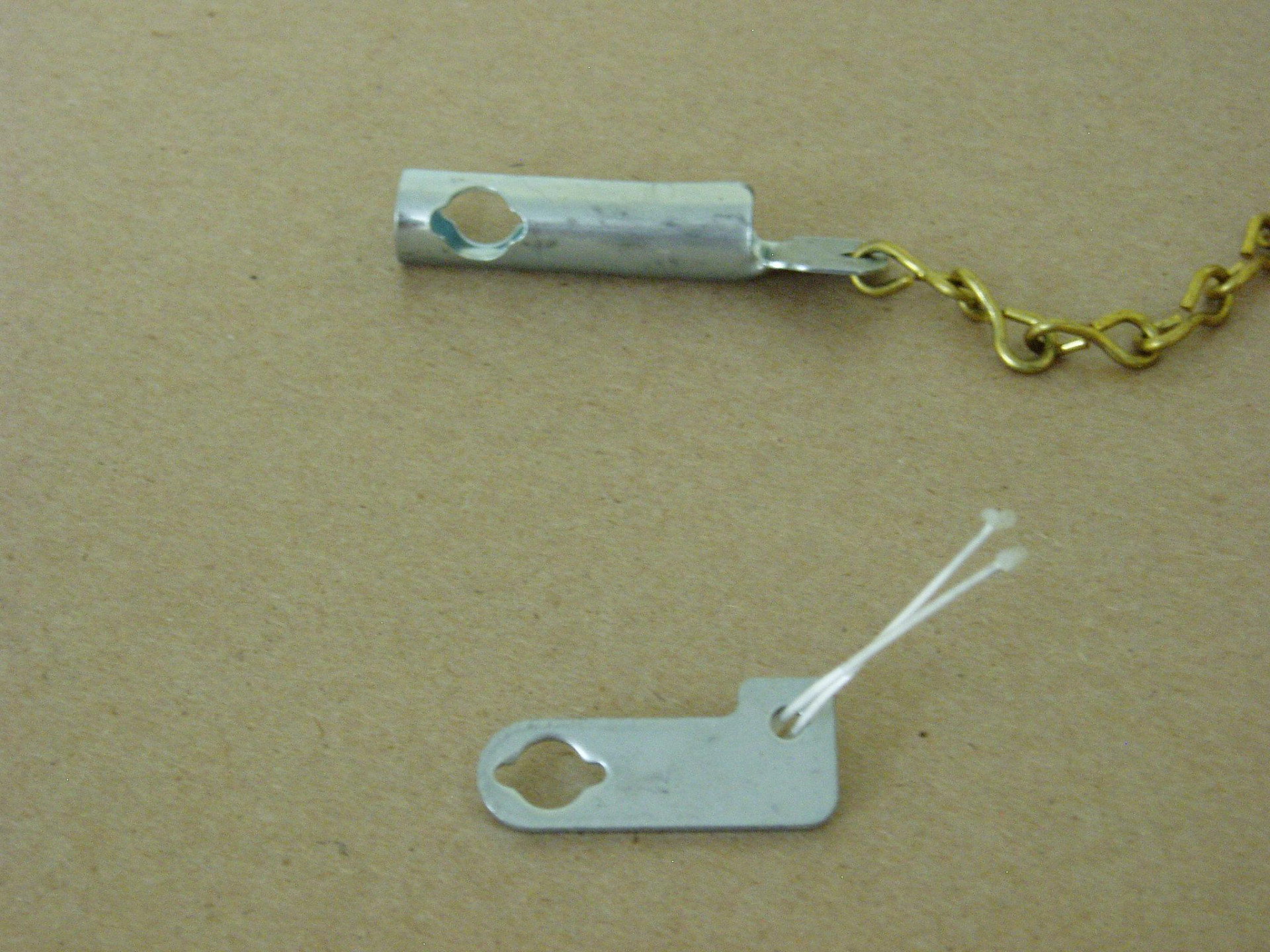
Onshore Order 3 – Site Security

Onshore Order 3 – Site Security

- Seals (tanks and LACTS)
- Run tickets
- No meter bypasses
- Reporting of theft
- Self inspection
- Seal records: 6-year retention
- Site security plan
- Site facility diagram
- Federal seals

Onshore Order 3 – Seals

- Applies to all valves that could provide removal of production before the measurement point, e.g.:
  - Production valve
  - Sales valve
  - Circulating valves
  - Equalizer valves
  - Drain valves…
- Applies to LACT components that could affect the measurement, e.g.:
  - Sample port, sampler volume control
  - Back pressure valve, any drain valves
  - Meter assembly…
- Uniquely numbered
- “Effectively” sealed: Valve cannot be opened without breaking the seal




16
6


11/05/2007


11/05/2007


This seal has been attached by an authorized oil and gas inspector for the Federal Government to insure accountability of Federal and/or Indian hydrocarbons.
REMOVAL OF THIS SEAL WITHOUT PERMISSION OF THE OFFICE LISTED ON THE REVERSE SIDE IS A VIOLATION OF FEDERAL REGULATIONS AND WILL RESULT IN ASSESSMENTS FOR NONCOMPLIANCE.
RETURN TAG TO BLM OFFICE
0305

45925
U.S. Department Of The Interior
Bureau of Land Management
FEDERAL SEAL
DO NOT REMOVE
Contact: MILES CITY FIELD OFFICE
111 Cherryrow Road
Miles City, Montana 59301
Phone: (406) 233-3643/3648/3651/3642
04/21/2010 13:50


02/25/2008


02/25/2008


OPEN
03/05/2008


03/05/2008

Well/Facility Signs

- Well sign:
  - Every well must have a sign that includes:
    - Well number
    - Name of operator
    - Lease serial number (not the API number)
    - Surveyed legal location (Qtr-Qtr, Sec, Twn, Rng)

Well/Facility Signs

- Facility Sign
  - Every facility where Federal or Indian oil is stored must be clearly identified with a sign that includes:
    - Operator name
    - Lease serial number or CA number (not API number)
    - Legal location (Qtr-Qtr, Sec, Twn. Rng)

One of the most common violations that we issue

Onshore Order 3 – Seal Records

February

Tk #1230

CC Unit #1 Seal Record

DATE	Sales VLV	Prod VLV	EQ VLV	BS VLV	Seal Off	Valve	Reason
2/7/2013				46802	46809	CL	Pull bottom
2/8/13				46896	46802	CL	Pull bottom
2/21/13	807562				46712	CL	Sold oil
		46818			46814	Op	
			46830		46832	Op	
2/22/13				46826	46896	CL	Pull bottom
2/23/13				46825	46826	CL	Pull bottom
2/24/13				46831	46825	CL	Pull bottom
2/25/13				46820	46831	CL	Pull bottom
2/26/13	47030				807562	CL	Transfer Oil
				46824	46820	CL	Pull bottom
2/27/13				46806	46824	CL	Pull bottom
2/28/13				46816	46806	CL	Pull bottom
2/28/13	807590				47030	CL	Sold oil
		46828			46818	Op	

Site Facility Diagram Requirements

43 CFR 3162.7-5 (d)
(d) *Site facility diagrams.*

(1) Facility diagrams are required for all facilities which are used in storing oil/condensate produced from, or allocated to, Federal or Indian lands. Facility diagrams shall be filed within 60 days after new measurement facilities are installed or existing facilities are modified or following the inclusion of the facility into a federally supervised unit or communitization agreement.

Site Facility Diagram Requirements

- (2) No format is prescribed for facility diagrams. They are to be prepared on 8½ "×11" paper, if possible, and be legible and comprehensible to a person with ordinary working knowledge of oil field operations and equipment. The diagram need not be drawn to scale.

Site Facility Diagram Requirements

- (3) A site facility diagram shall accurately reflect the actual conditions at the site and shall, commencing with the header if applicable, clearly identify the vessels, piping, metering system, and pits, if any, which apply to the handling and disposal of oil, gas and water. The diagram shall indicate which valves shall be sealed and in what position during the production or sales phase. The diagram shall clearly identify the lease on which the facility is located and the site security plan to which it is subject, along with the location of the plan.

Site Facility Diagram Requirements

Onshore Order #3, III. I. 1.

I. *Site Facility Diagram*

1. Minimum Standards

A facility diagram is required for all facilities, including those facilities not located on Federal or Indian lands but which are subject to Federal supervision through commitment to a federally approved unit agreement or communitization agreement. This requirement is not applicable to dry gas production facilities where no liquids are produced or stored. No format is prescribed for facility diagrams. However, the facility diagram should be prepared on 8½ x 11 paper, if possible, and should be legible and comprehensible to an individual with an ordinary working knowledge of oil field operations.

Site Facility Diagram Requirements

Onshore Order #3, III. I. 1.
The facility diagram shall:
- Accurately reflect the relative position of the production equipment, piping, and metering systems in relationship to each other, but need not be to scale
- Commencing with the header, identify the vessels, piping, and metering systems located on the site and shall include the appropriate valves and any other equipment used in the handling, conditioning, and disposal of oil. gas, and water produced, including any water disposal pits or emergency pits. In those instances where pits are co-located, such pits may be shown in parentheses on the facility diagram

.

Site Facility Diagram Requirements

Onshore Order #3, III. I. 1.

- Indicate which valve(s) shall be sealed and in what position during the production and sales phases and during the conduct of other production activities, i.e., circulating tanks, drawing off water, which may be shown by an attachment, if necessary
- Require as an addition. when describing co-located facilities operated by 2 different operators, a skeleton diagram of the co-located facility, showing only equipment. For co-located common storage facilities operated by 1 operator, one facility diagram shall be sufficient

Site Facility Diagram Requirements

Onshore Order #3, III. I. 1.

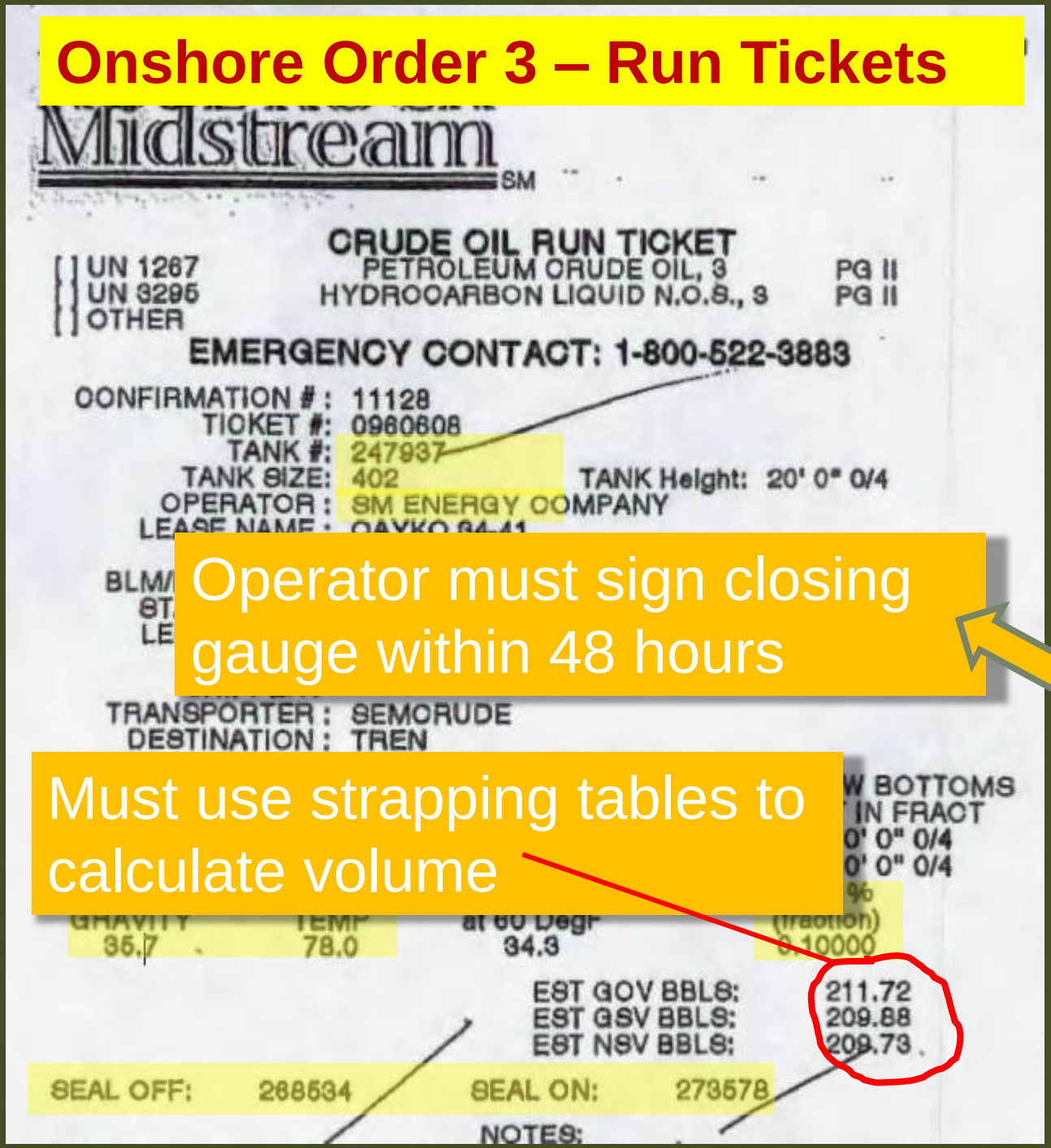
- Be filed within 60 days of completion of construction of a new facility or when existing facilities are modified or when a non-Federal facility is included in a Federally supervised unit agreement or communitization agreement
- Clearly identify the lease to which it applies and the location of the facility covered by quarter section, section, township, and range or by a legal land description, with co-located facilities being identified by each lease and its facilities
- Clearly identify the site security plan covering the facility

Onshore Order 3 – Site Facility Diagrams

The Security Plan only has to be submitted when requested by the BLM. The Site Facility Diagram is required to be submitted within 60 days

Example 1
Example 2

Onshore Order 3 – Run Tickets


Midstream SM

CRUDE OIL RUN TICKET

[ ] UN 1267 PETROLEUM CRUDE OIL, 3 PG II
[ ] UN 3295 HYDROCARBON LIQUID N.O.S., 3 PG II
[ ] OTHER

EMERGENCY CONTACT: 1-800-522-3883

CONFIRMATION # : 11128
TICKET #: 0960808
TANK #: 247937
TANK SIZE: 402 TANK Height: 20' 0" 0/4
OPERATOR : SM ENERGY COMPANY
LEASE NAME : OAYKO 84-41

BLM/
ST
LE

TRANSPORTER : SEMORUDE
DESTINATION : TREN

W BOTTOMS
IN FRACT
0' 0" 0/4
0' 0" 0/4
%

GRAVITY 35.7 TEMP 78.0 at 60 Degr 34.3 (fraction) 0.10000

EST GOV BBLS: 211.72
EST GSV BBLS: 209.88
EST NSV BBLS: 209.73

SEAL OFF: 268534 SEAL ON: 273578

NOTES:

Operator must sign closing gauge within 48 hours

Must use strapping tables to calculate volume

- Seller
- Fed/Ind Lease #
- Tank location legal desc.
- Tank # and capacity
- Open/close gauge, temperature, date
- Seal numbers
- Observed API gravity & temperature
- S&W
- Name/signature of gauger and witness

Onshore Order 4 – Oil Measurement

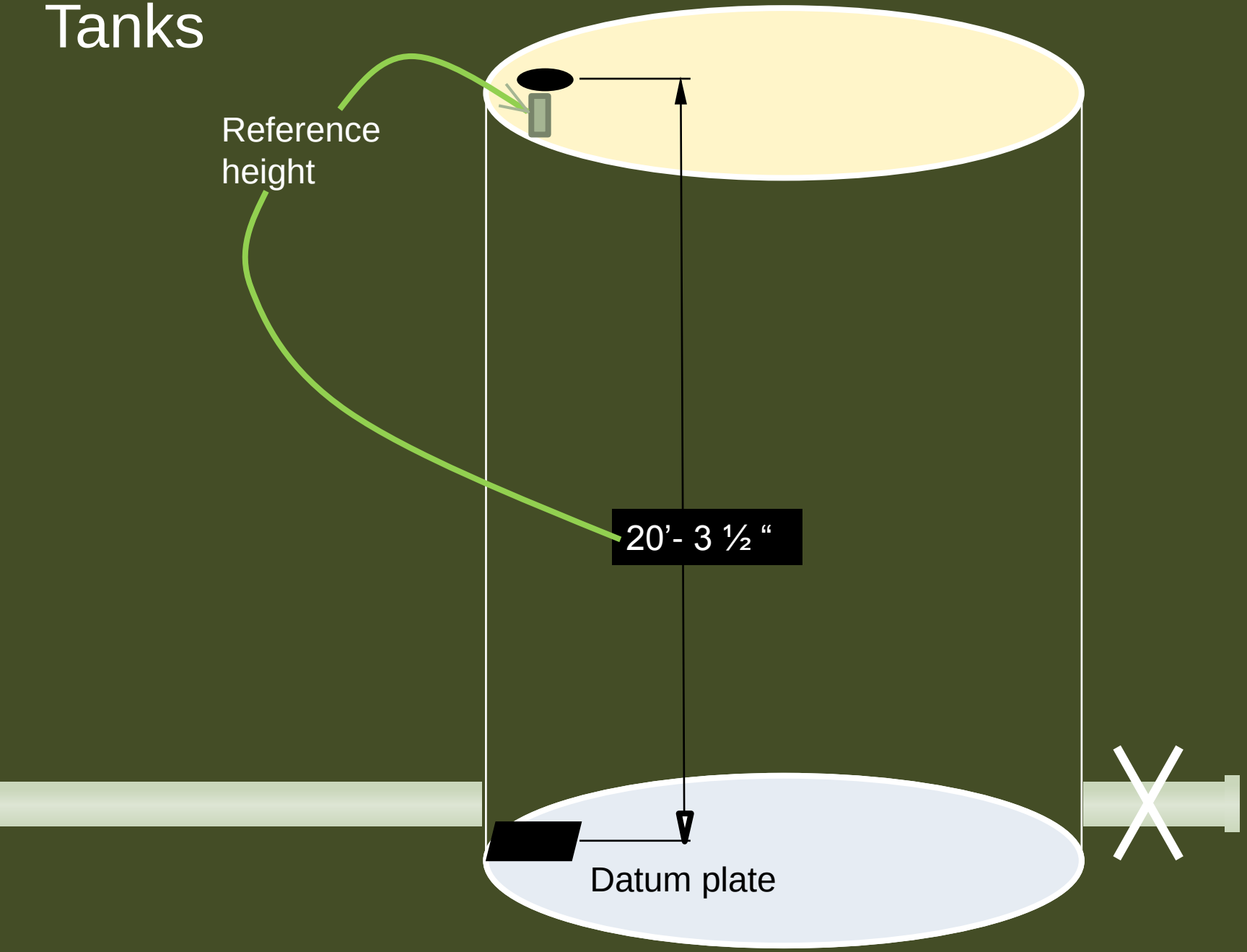
Onshore Order 4 – Oil Measurement

- Tank gauging
- LACT, positive displacement meter
- Sediment and Water (S&W) determination
- API gravity
- Variance required for other methods (e.g. Coriolis)

Onshore Order 4 – Tank Measurement

- Tank requirements:
  - Pressure-vacuum system
  - Strapping required – submit tank table on request from BLM
  - Datum plate
  - Gauging reference
  - Unique number stenciled on the tank

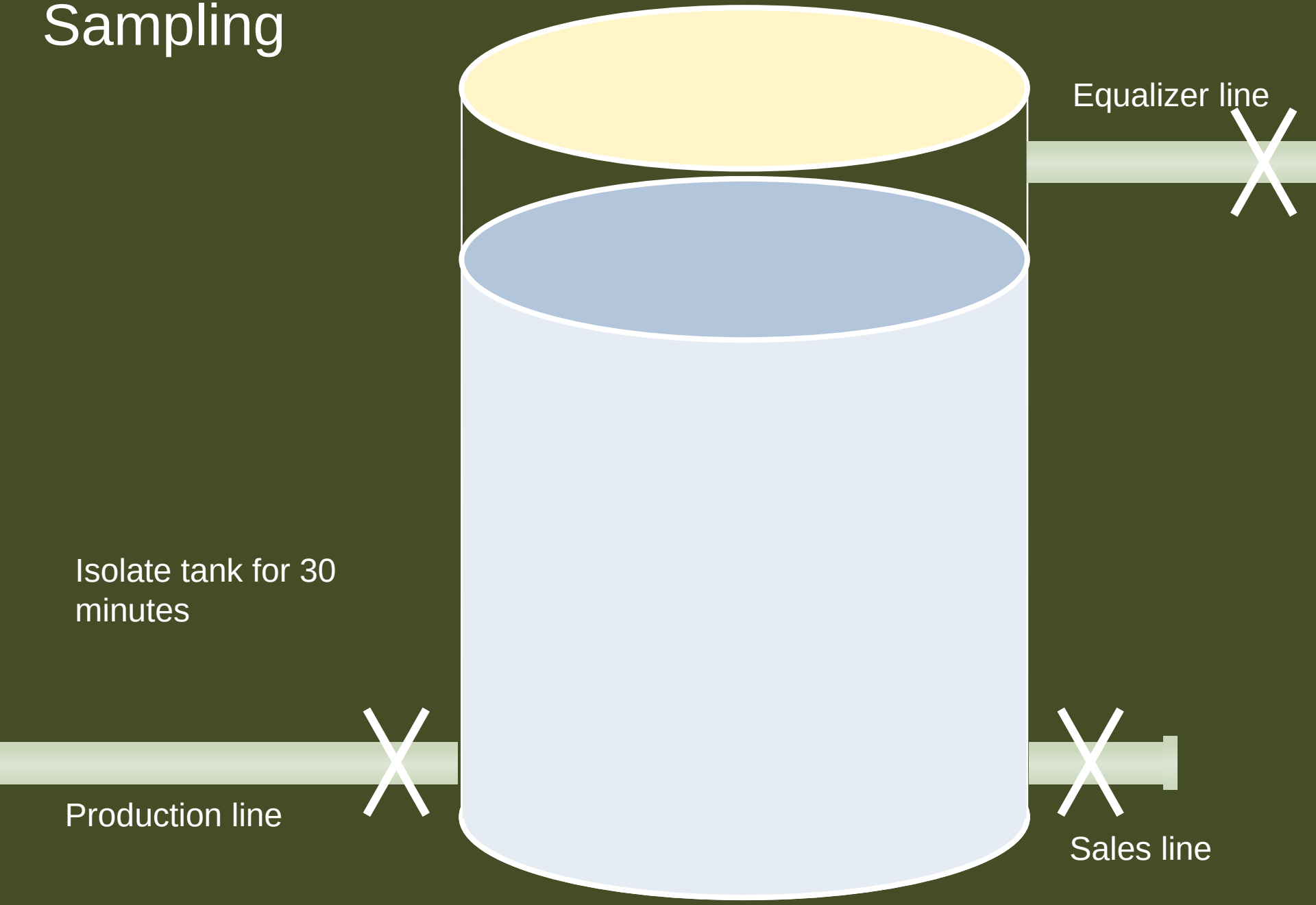
Tanks




20.3½
OZ
OZ


ENARDO
TULSA OK
VACUUM 4 OZ
REF. PT

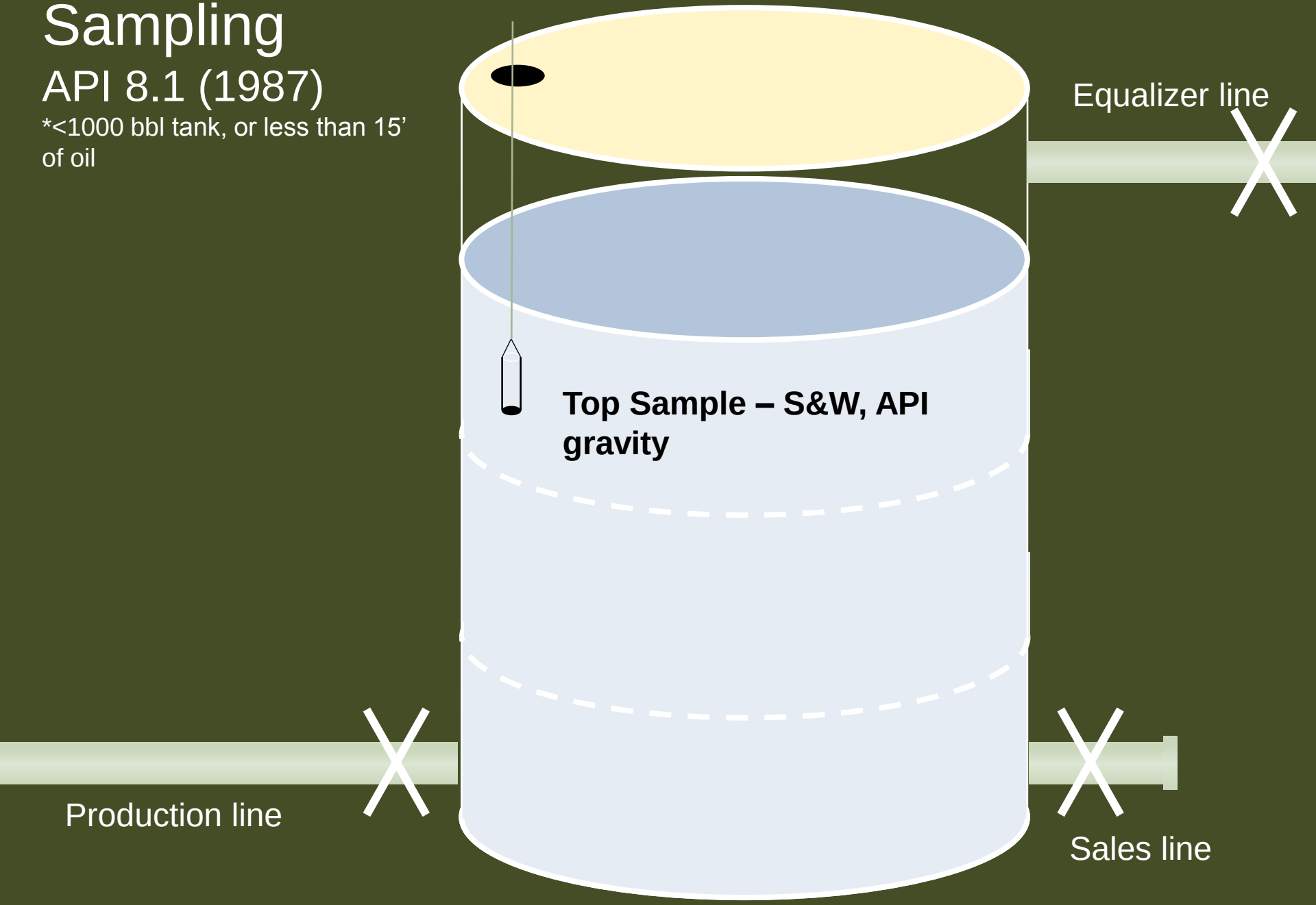
Sampling


Equalizer line
Isolate tank for 30 minutes
Production line
Sales line

Sampling

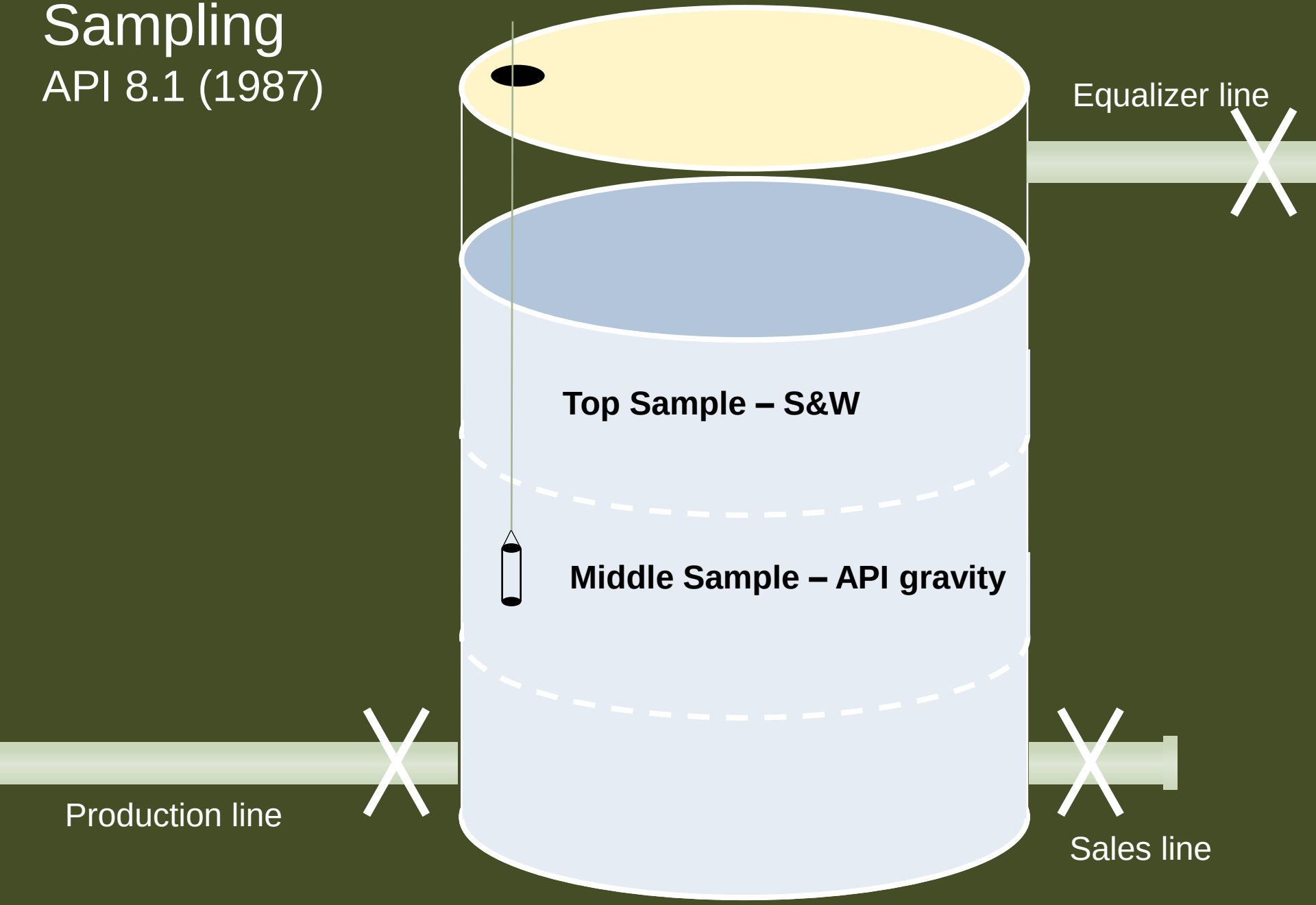
API 8.1 (1987)

*<1000 bbl tank, or less than 15’ of oil



Sampling

API 8.1 (1987)



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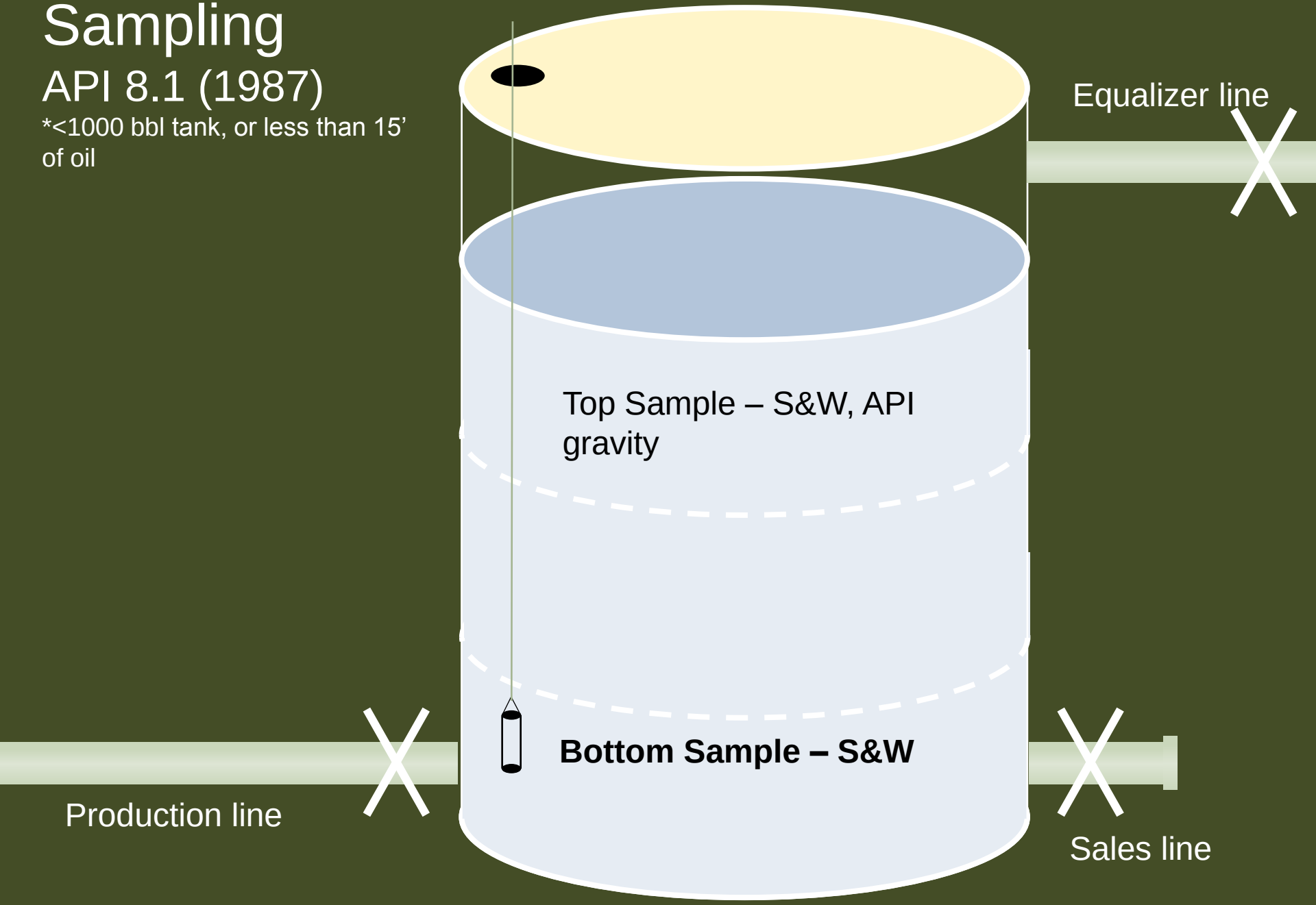


Gauging – Temperature

5 minutes

½ way

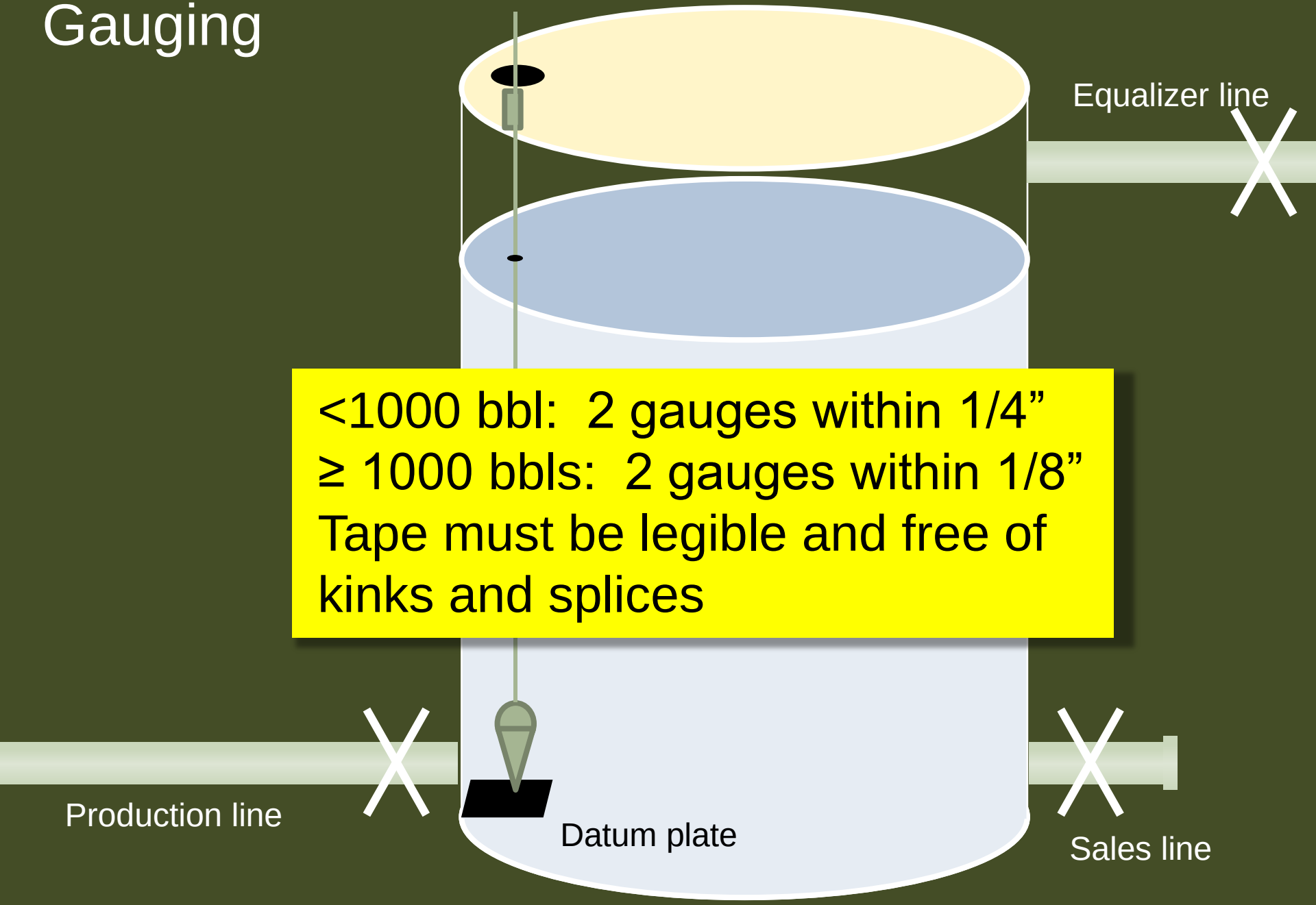
12” minimum

Equalizer line

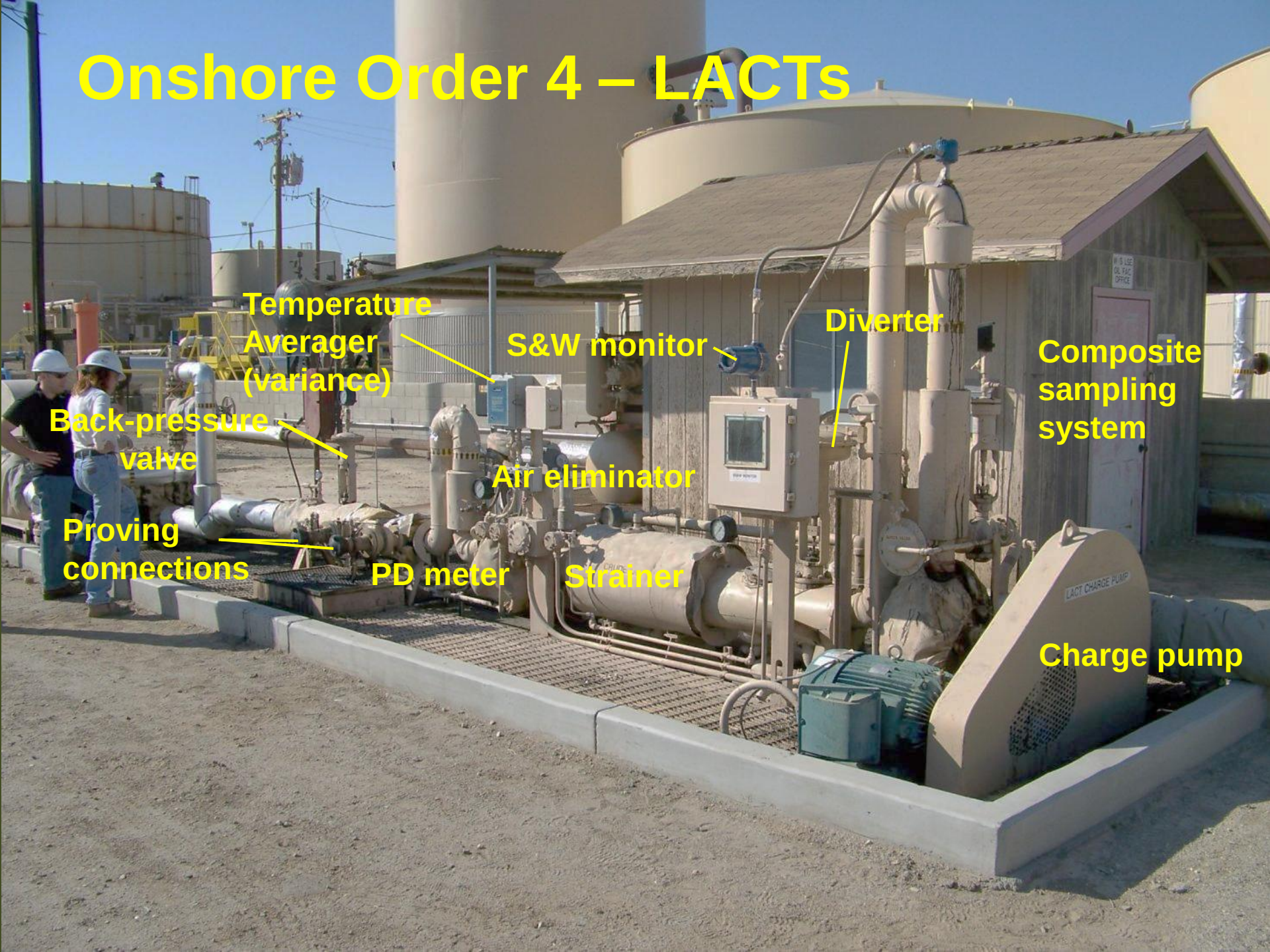
Production line

Sales line

Gauging


Equalizer line
<1000 bbl: 2 gauges within 1/4”
≥ 1000 bbls: 2 gauges within 1/8”
Tape must be legible and free of kinks and splices
Production line
Datum plate
Sales line

Onshore Order 4 – LACTs



Onshore Order 4 – LACT proving

- Frequency:
  - Up to 100,000 bbls/month – quarterly
  - 100,000 bbls/month and over – monthly
- Acceptable provers:
  - Displacement
  - Tank
  - Master meter
- Repeatability:
  - ±0.0005 (0.05%) for 5 consecutive runs out of 6
- Meter factor deviation:
  - ±0.0025 (0.25%) from previous meter factor
  - Between 0.9900 to 1.0100

Onshore Order 4 – LACT proving

- Proving reports:
  - Information required in API 12.2 (1987)
  - Submit to the BLM within 10 business days

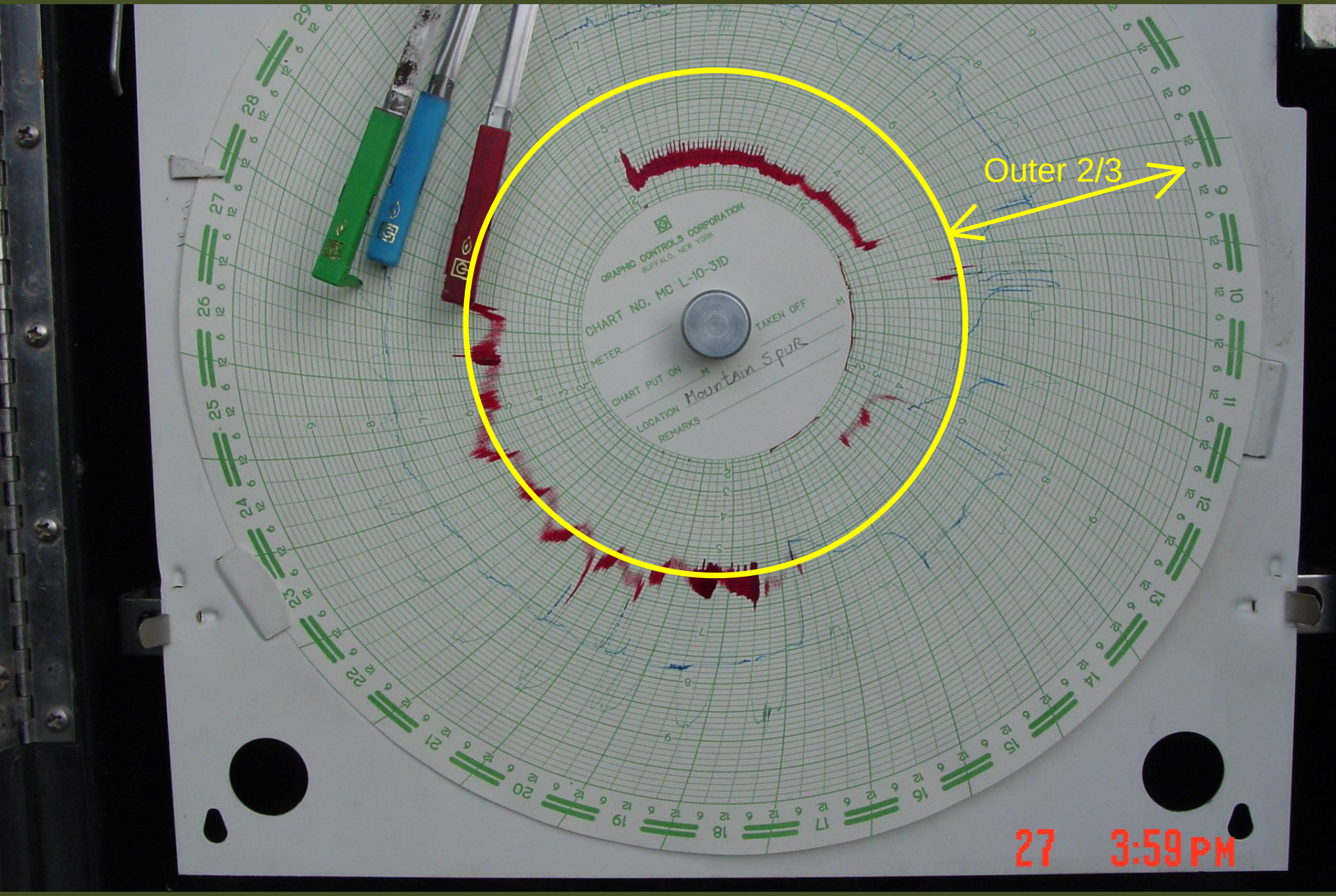
Onshore Order 5 – Gas Measurement

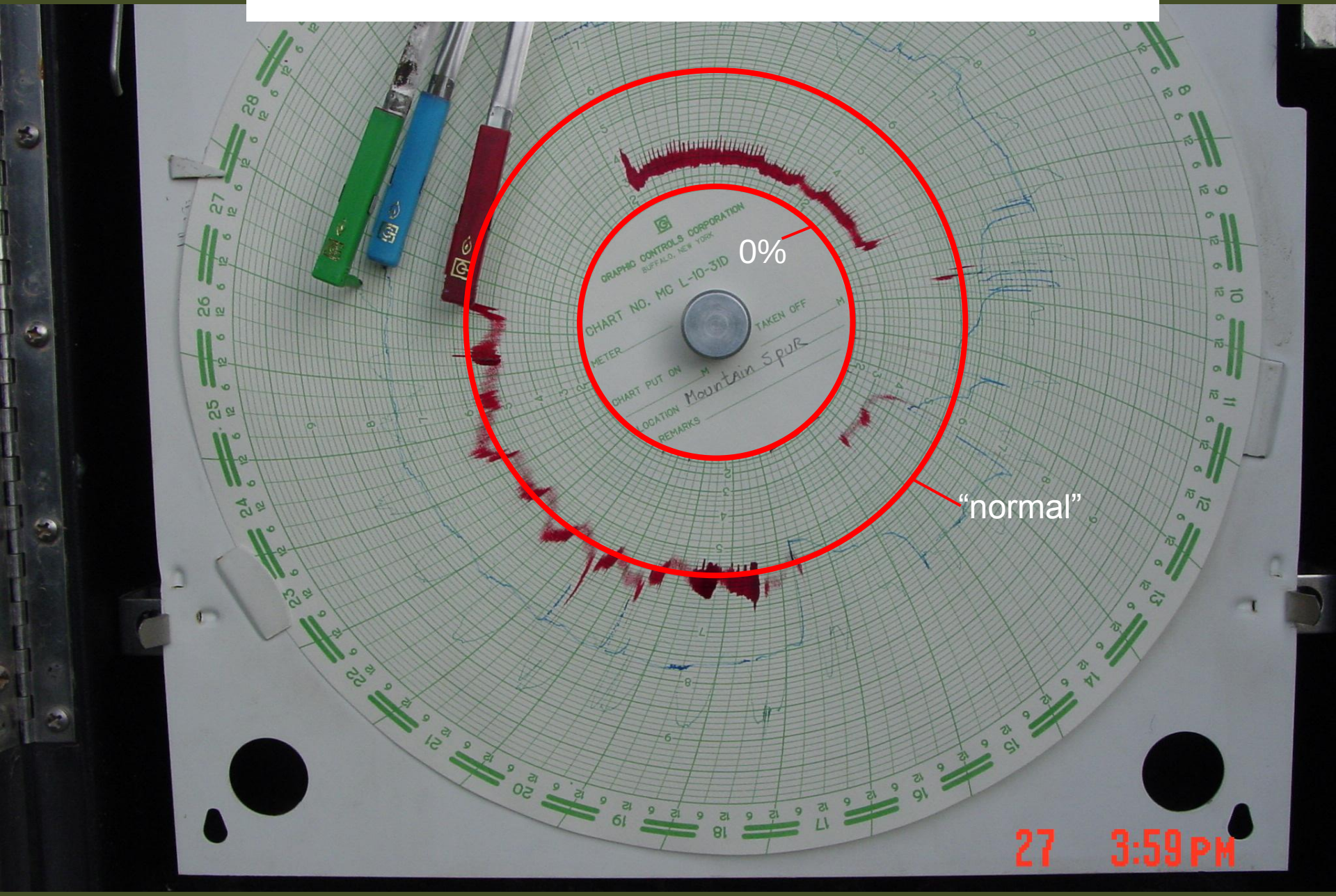
Onshore Order 5 – Gas Measurement

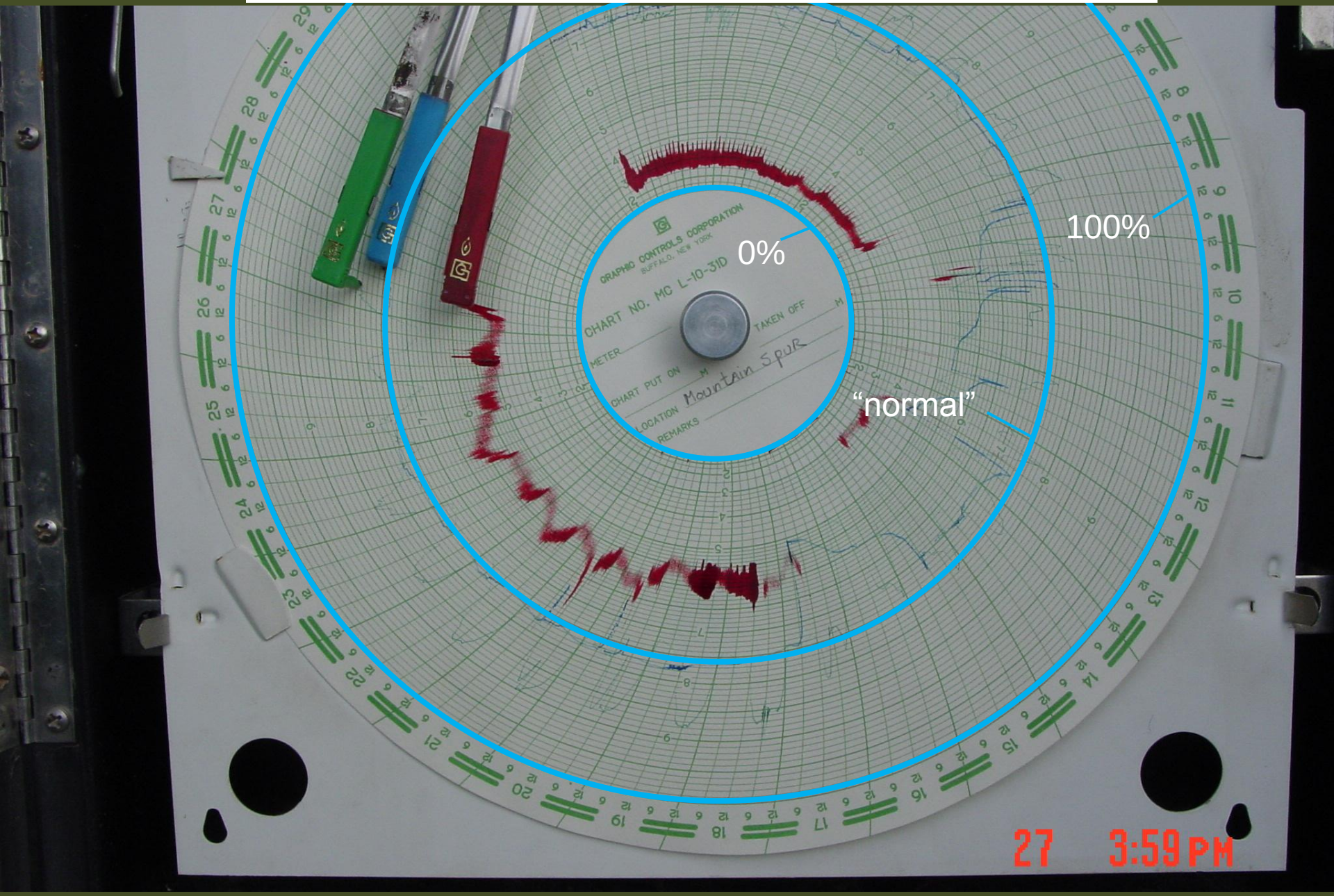
- Orifice plates
  - AGA Report No. 3 (1985)
  - No Beta ratio restrictions for <100 Mcf/day
  - Semi-annual inspection
  - Variance required for other devices including flow conditioners
- Chart recorders…
- Gas sampling
  - Once per year
- Calculations
  - AGA Report 3 (1985)
  - Atmospheric pressure: contract, measured, or calculated from elevation

Onshore Order 5 – Charts

- Operation
  - DP pen in outer 2/3 for >100 Mcf/day
  - Static pen in outer 2/3
  - Temperature recorder for >200 Mcf/day
- Calibration
  - Quarterly
  - 3 points: 0, 100% of range, normal operating
  - Must adjust to zero error
  - Submit calibration report on request


Outer 2/3
GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC L-10-31D
METER
TAKEN OFF
CHART PUT ON
LOCATION Mountain Spur
REMARKS
27 3:59 PM


GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC L-10-31D
METER
TAKEN OFF
CHART PUT ON
LOCATION Mountain Spur
REMARKS
0%
"normal"
27 3:59 PM

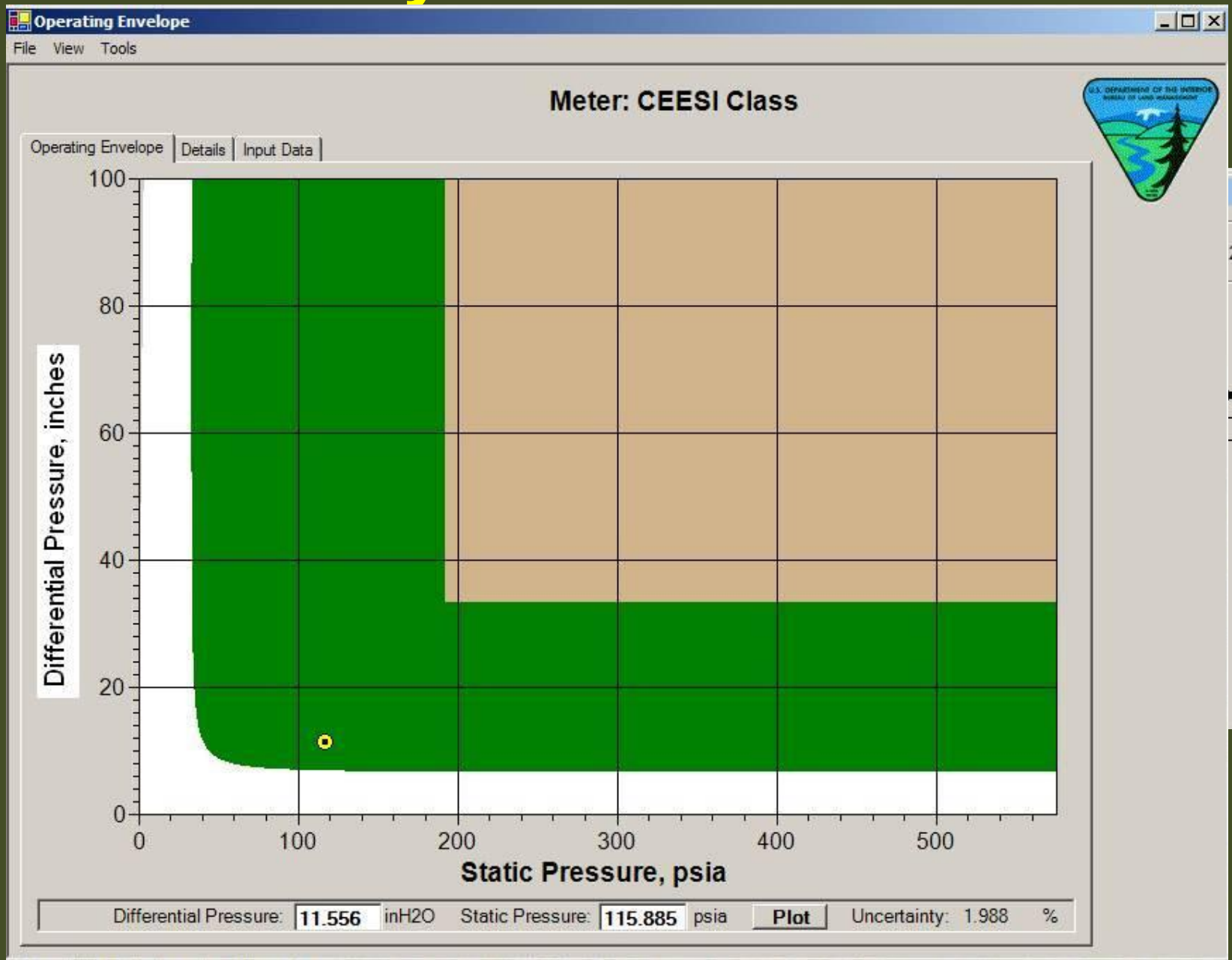

GRAPHIC CONTROLS CORPORATION
BUFFALO, NEW YORK
CHART NO. MC L-10-31D
METER
TAKEN OFF
CHART PUT ON
LOCATION Mountain Spur
REMARKS
0%
100%
"normal"
27 3:59 PM

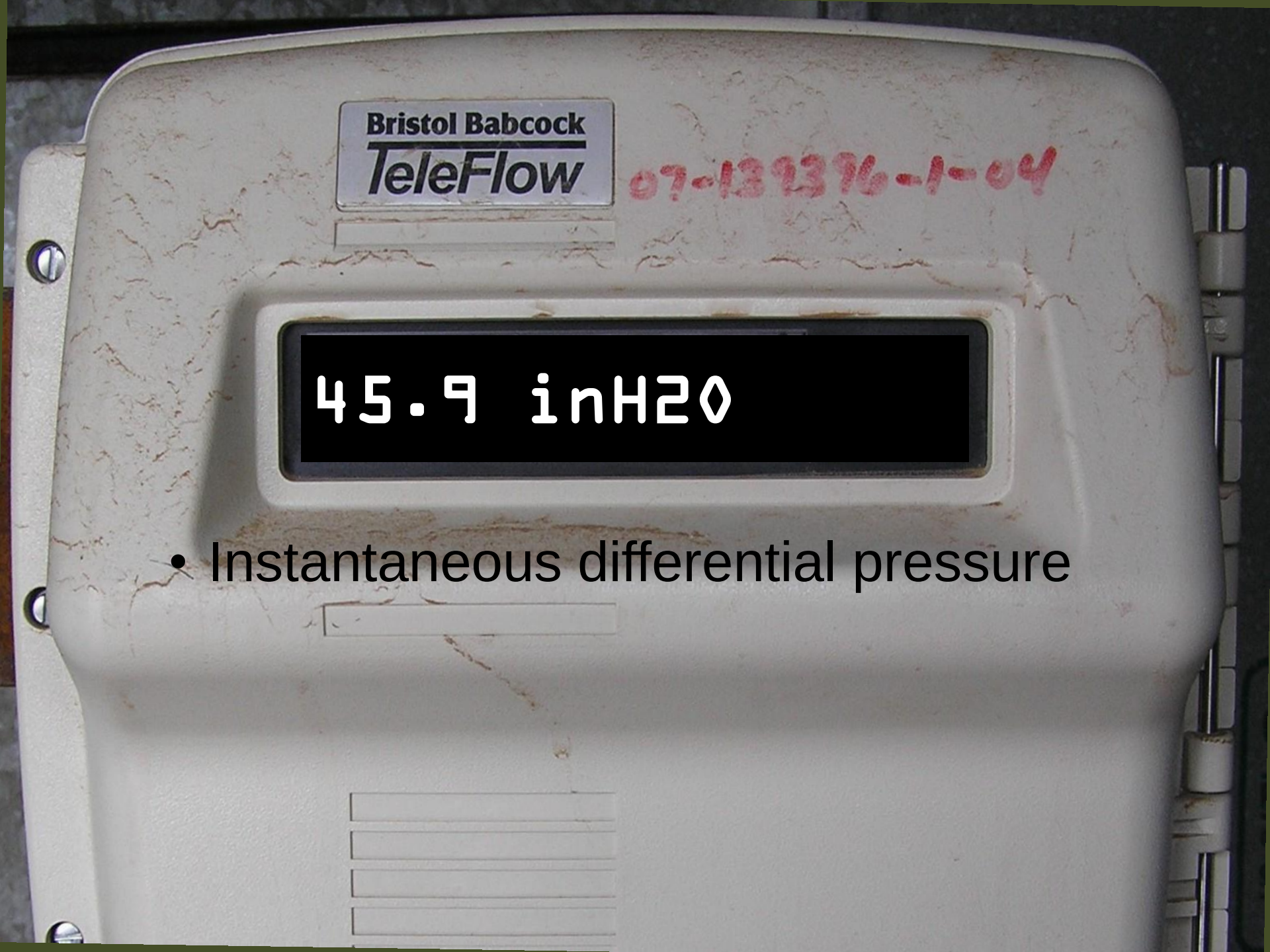
NTL-2007-1
Electronic Flow Computers

NTL 2007-1 Electronic Flow Computers

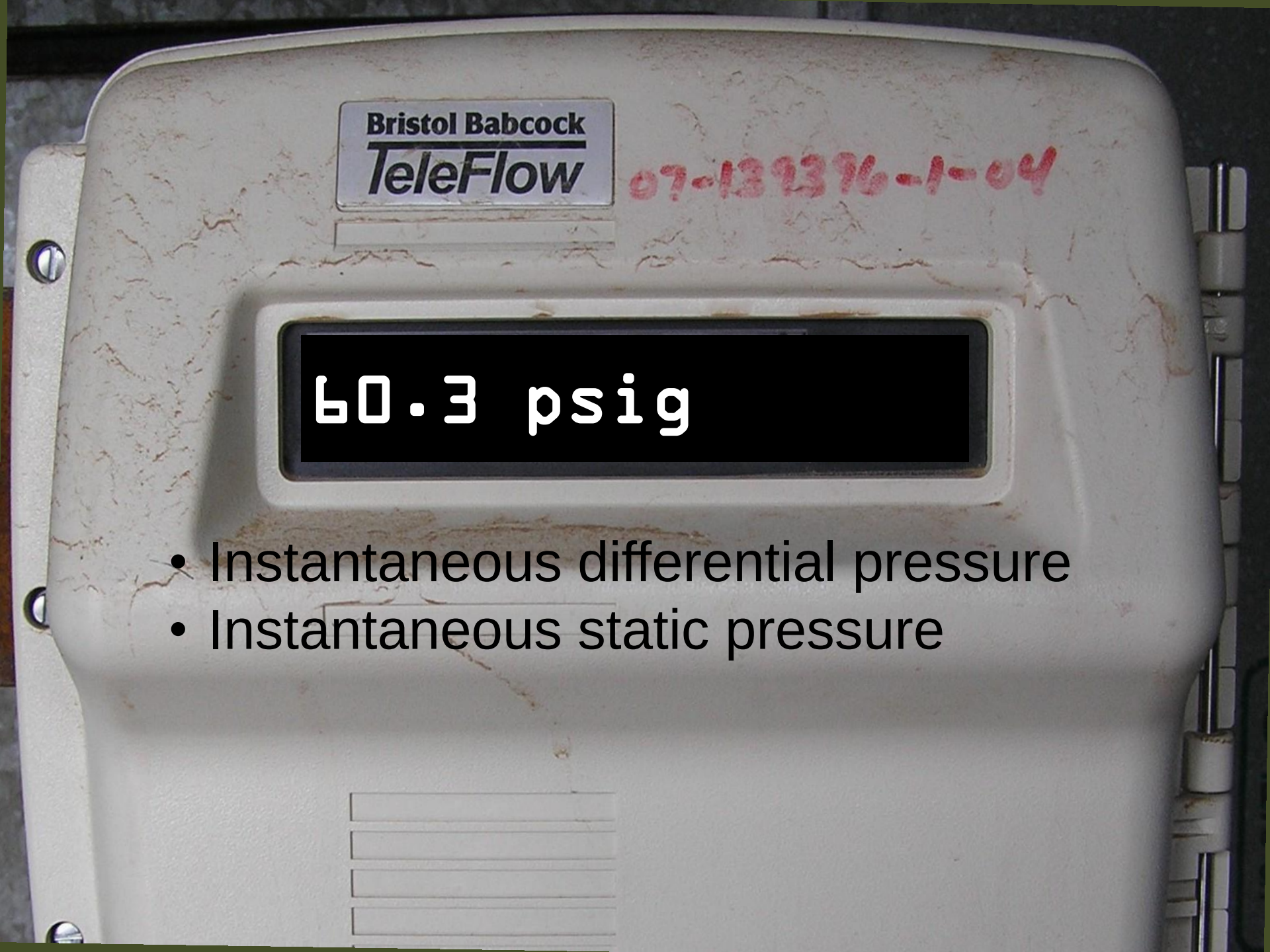
- Parallels Onshore Order 5 requirements
- Adopts AGA-8 and portions of API 21.1
- Operation
  - Overall uncertainty ±3% for >100 Mcf/day
  - Low-flow cutoff ≤0.5”
  - Calculations per API 14.3.3 (1992) are OK

Uncertainty Calculator

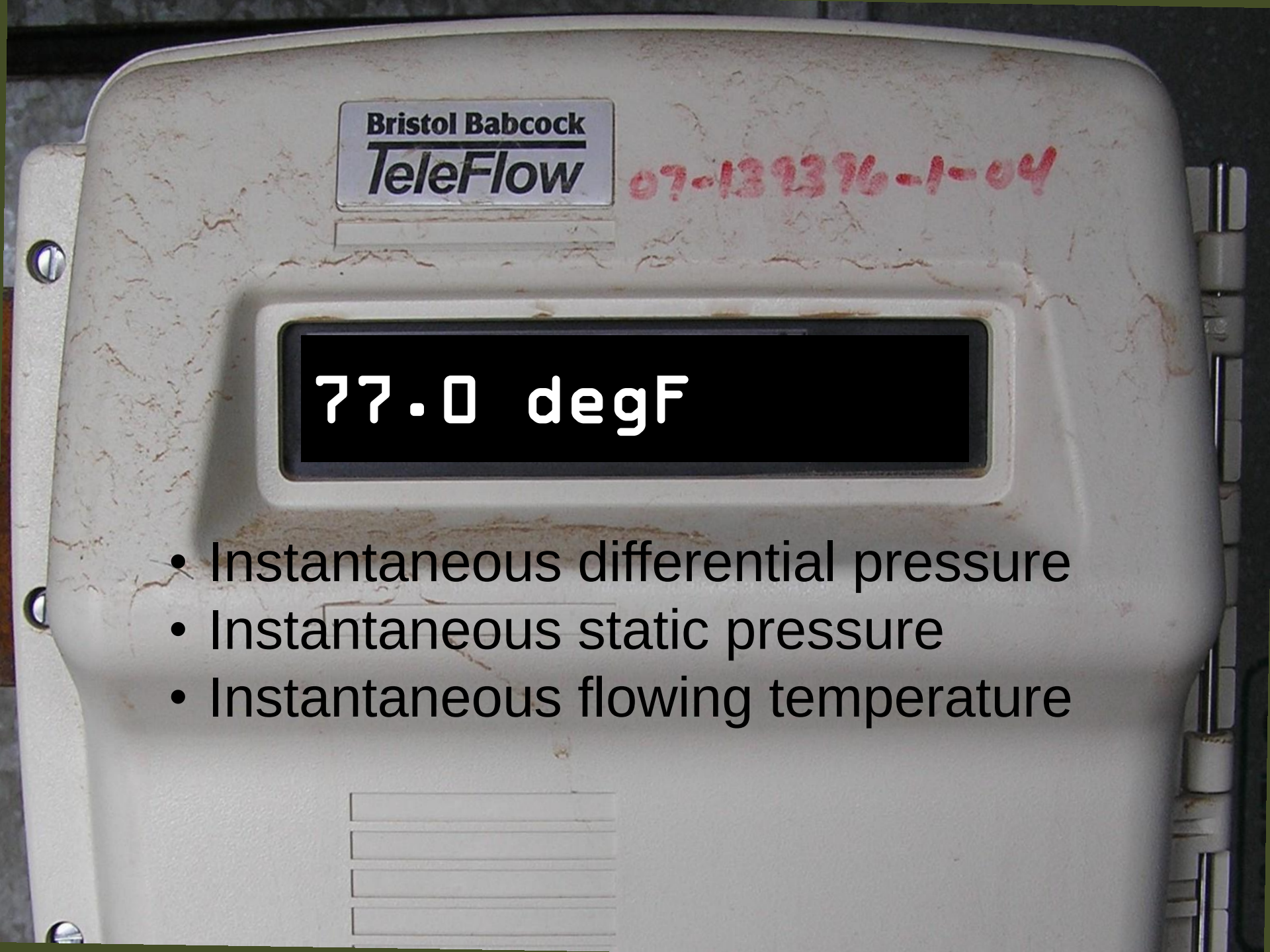




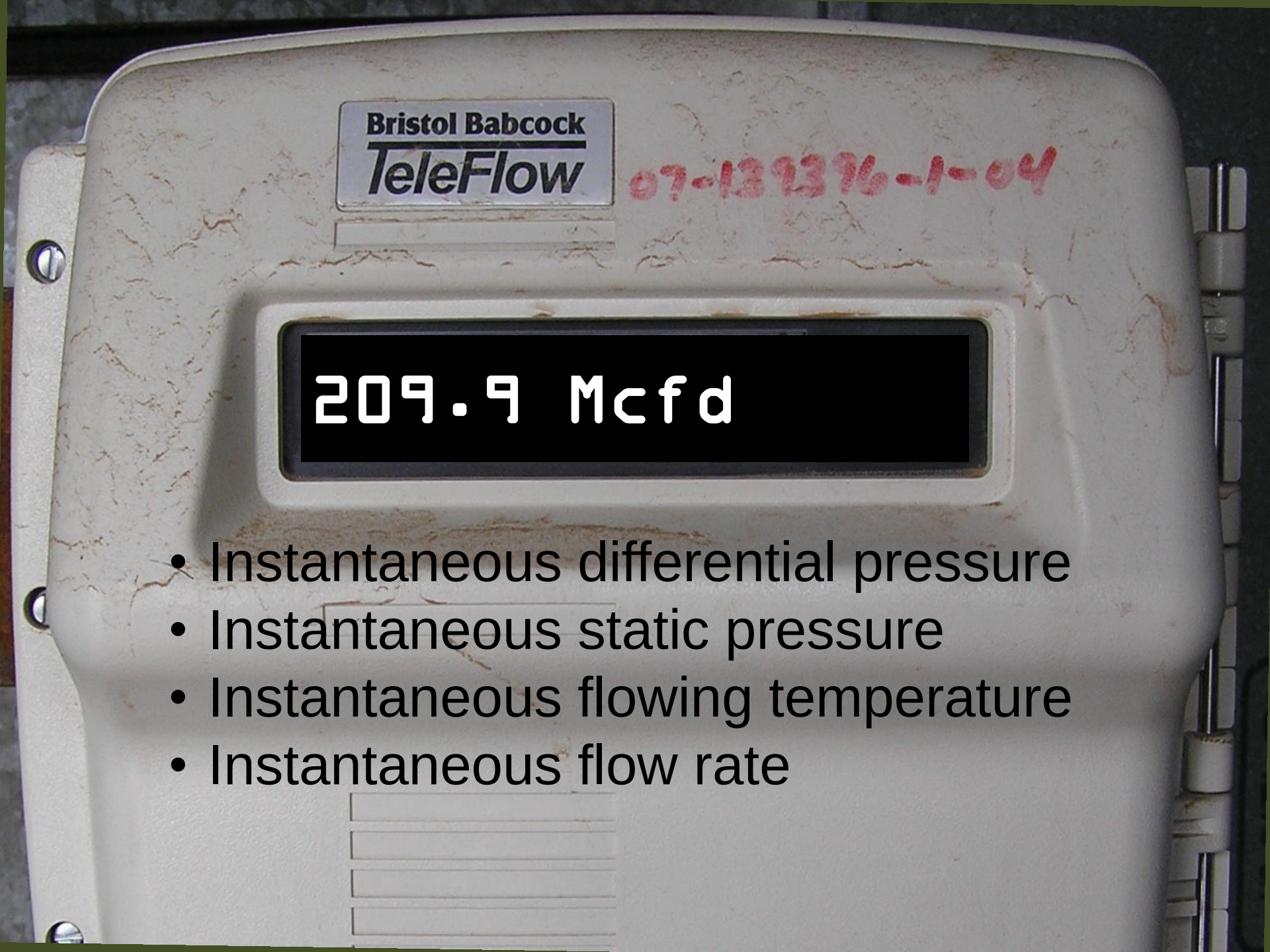
- Instantaneous differential pressure



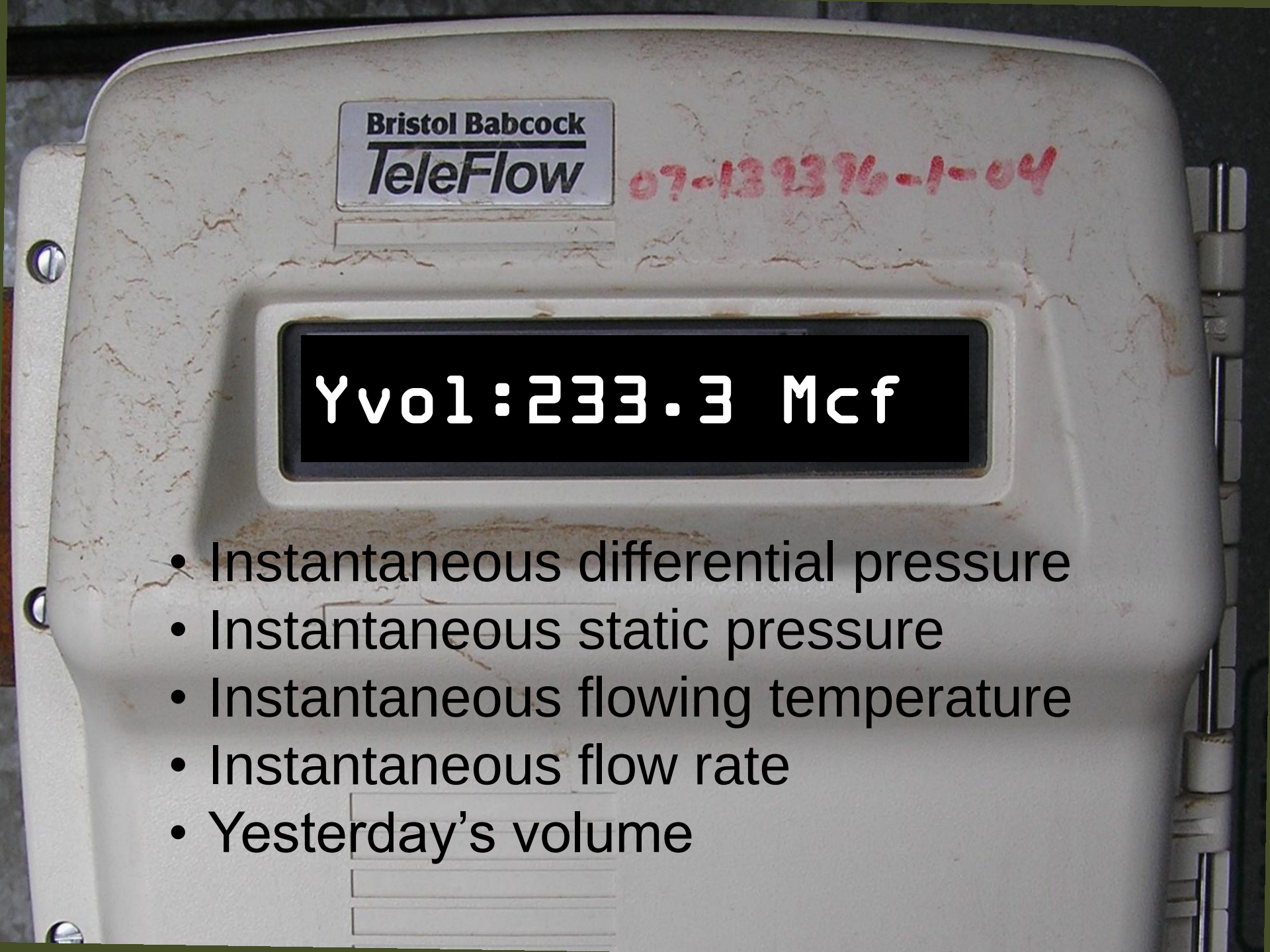
- Instantaneous differential pressure
- Instantaneous static pressure



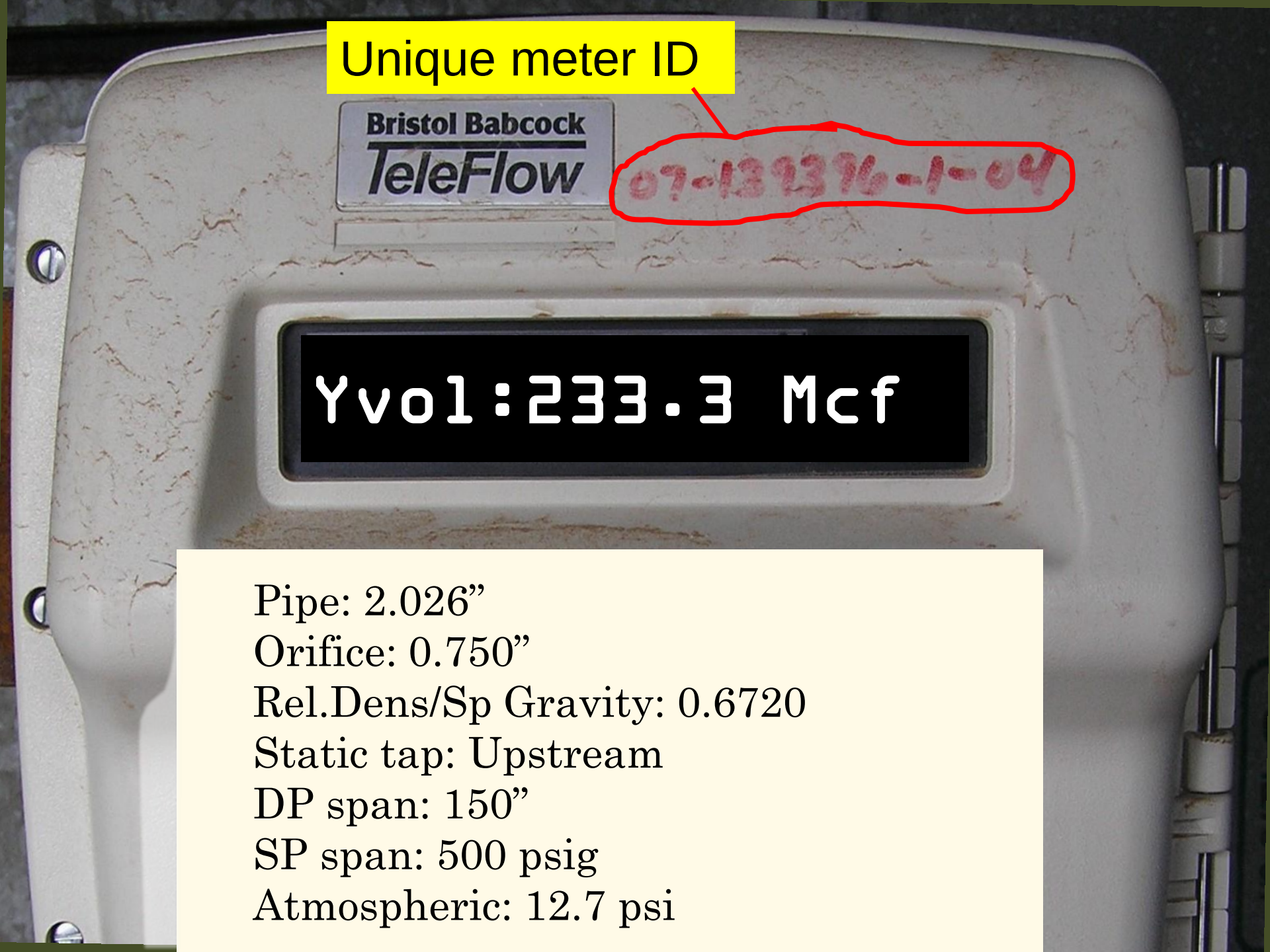
- Instantaneous differential pressure
- Instantaneous static pressure
- Instantaneous flowing temperature



- Instantaneous differential pressure
- Instantaneous static pressure
- Instantaneous flowing temperature
- Instantaneous flow rate



- Instantaneous differential pressure
- Instantaneous static pressure
- Instantaneous flowing temperature
- Instantaneous flow rate
- Yesterday’s volume



Pipe: 2.026”
Orifice: 0.750”
Rel.Dens/Sp Gravity: 0.6720
Static tap: Upstream
DP span: 150”
SP span: 500 psig
Atmospheric: 12.7 psi

Make, model, Upper Range Limit for DP and SP

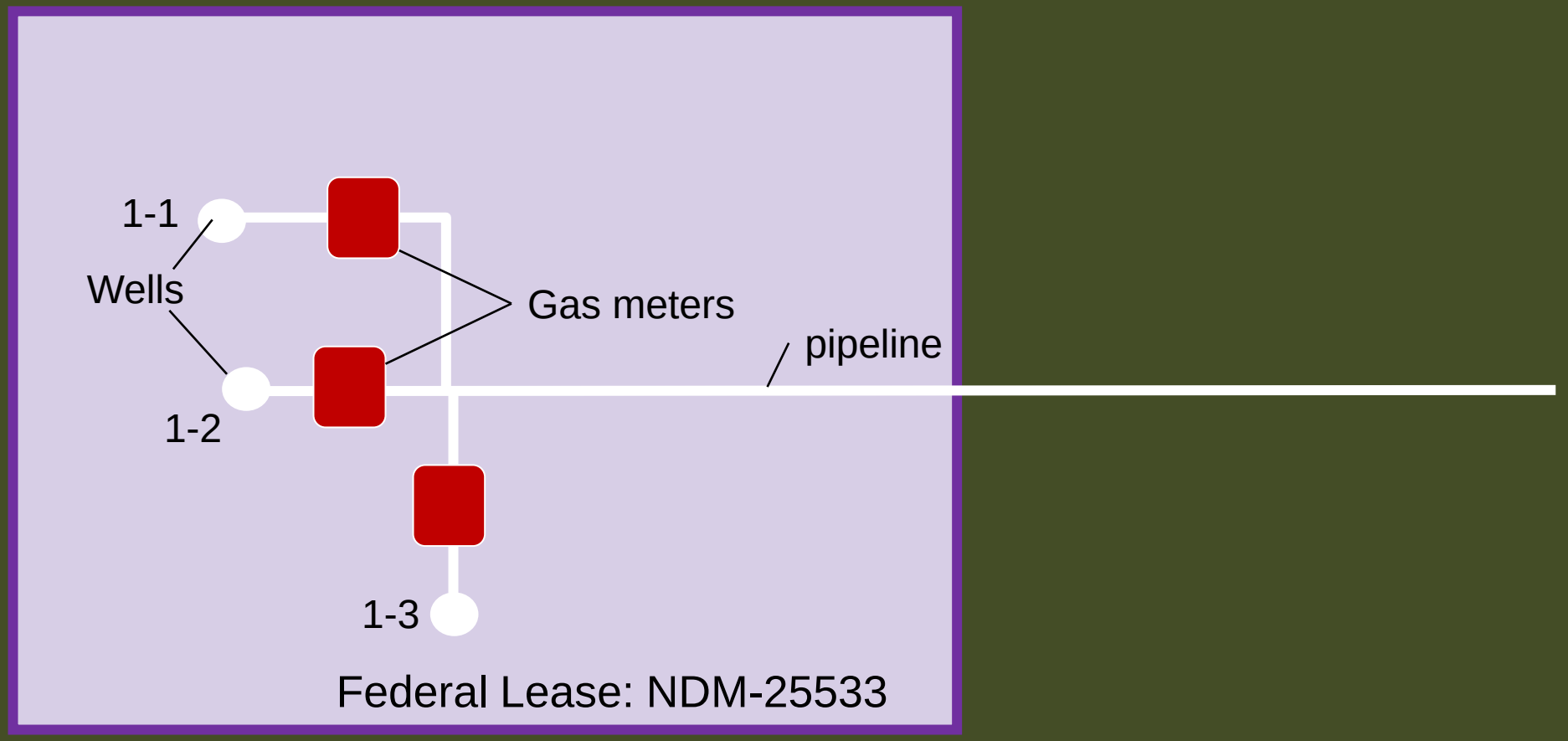
NTL 2007-1 Electronic Flow Computers

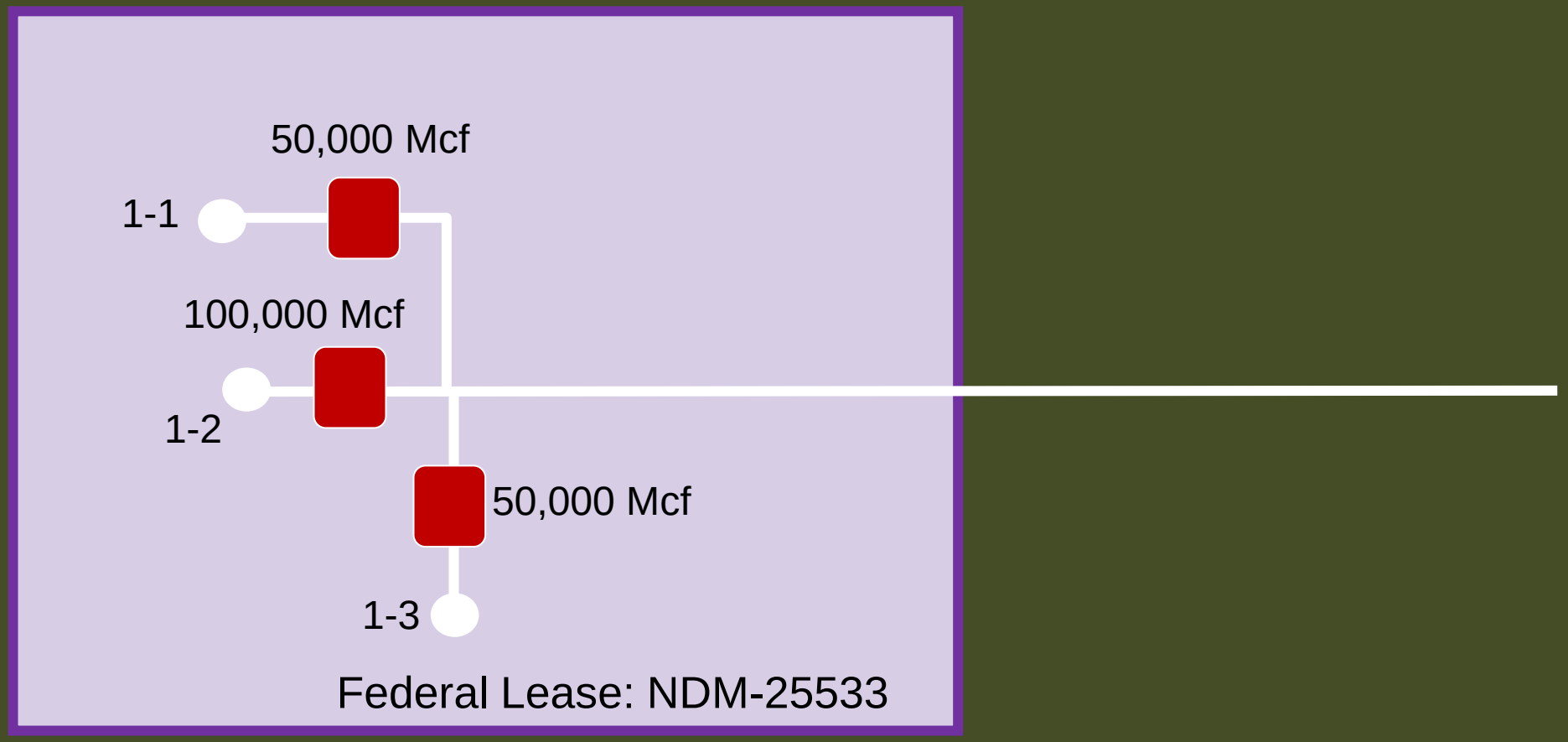
- Calibration
  - **Quarterly**
  - **3 points for DP and SP:**
    - **0**
    - **100% of span**
    - **normal operating**
  - **Temperature is tested near the normal flowing temperature**
  - **Tolerance for DP and SP is transducer reference accuracy**
  - **Tolerance for temperature is $2^{o}F$**
  - **Calibration equipment must be at least 2 times more accurate than the transducer (API 21.1)**

Point of Measurement, Beneficial Use

“Point of Measurement” (POM)

- Meters used for royalty determination
- On the lease, Communitized Area (CA), or unit, unless BLM approves otherwise
- Does not have to be the sales or custody transfer meter
- Only the POM must meet BLM measurement standards


1-1
Wells
Gas meters
pipeline
1-2
1-3
Federal Lease: NDM-25533

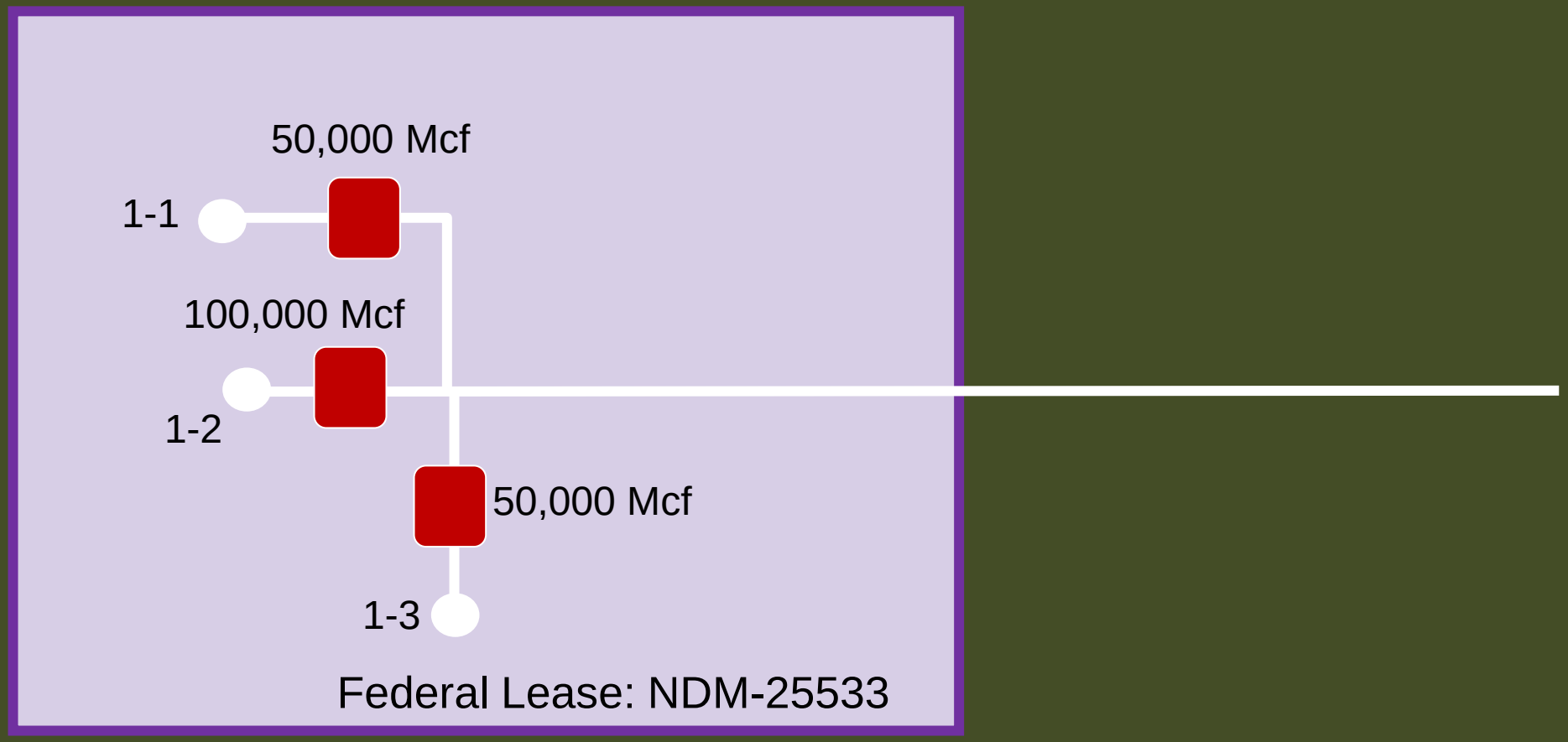


What is/are the Point(s) of Measurement?

On what volume is royalty due?

Which meters must meet Onshore Order 5 standards?

Approvals required?

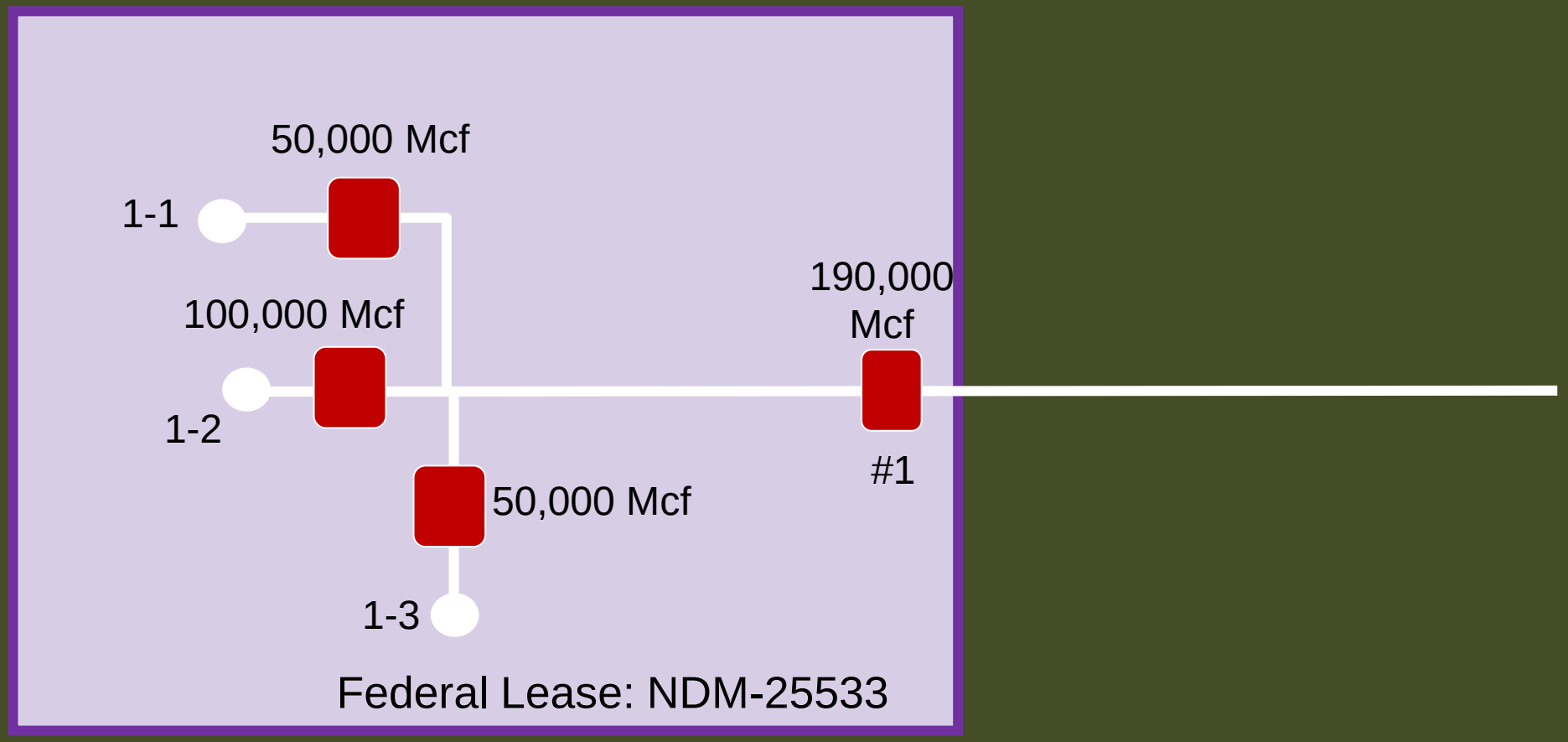


What is/are the Point(s) of Measurement? Wellhead meters

On what volume is royalty due? 200,000 Mcf

Which meters must meet Onshore Order 5 standards? Wellhead meters

Approvals required? No

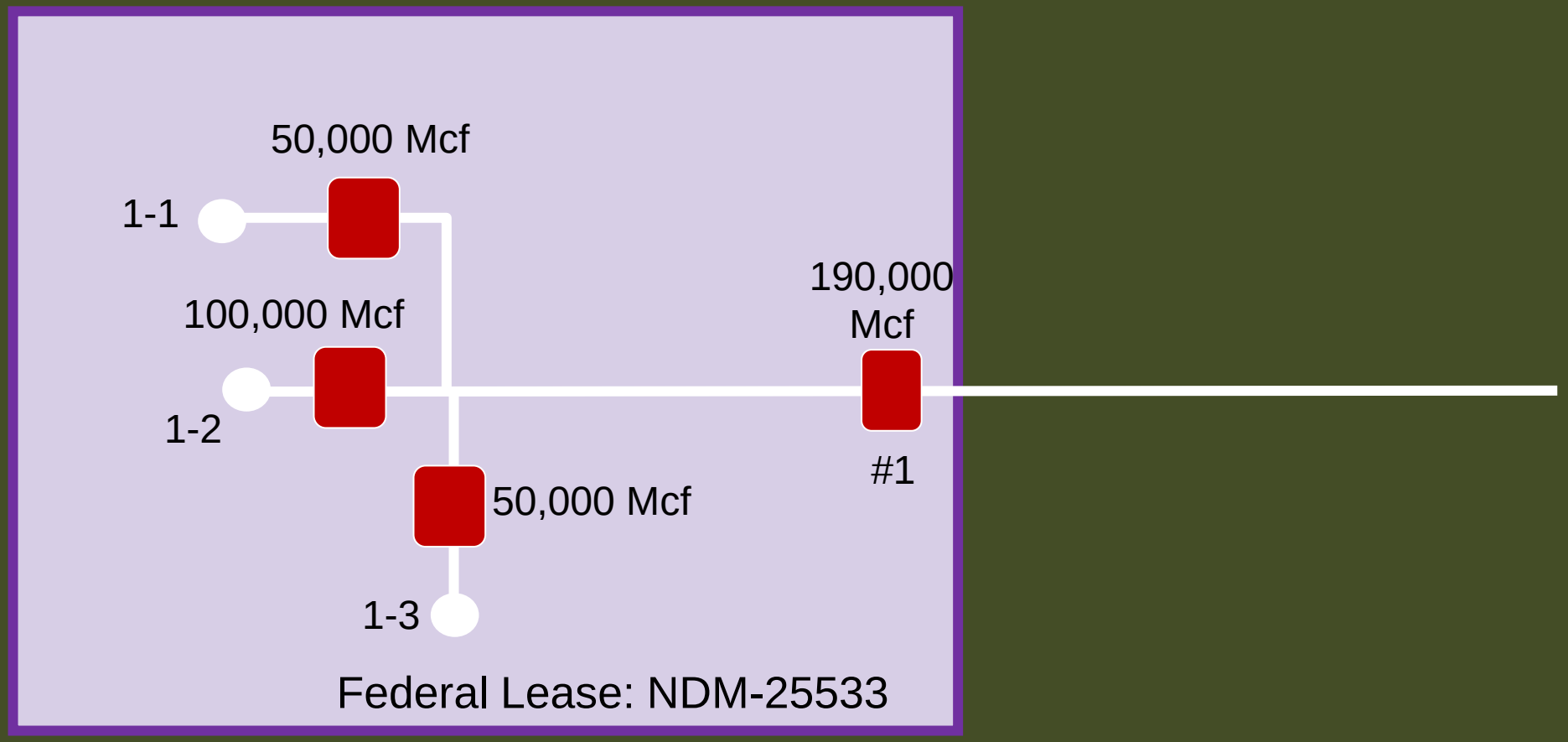


What is/are the Point(s) of Measurement?

On what volume is royalty due?

Which meters must meet Onshore Order 5 standards?

Approval required?

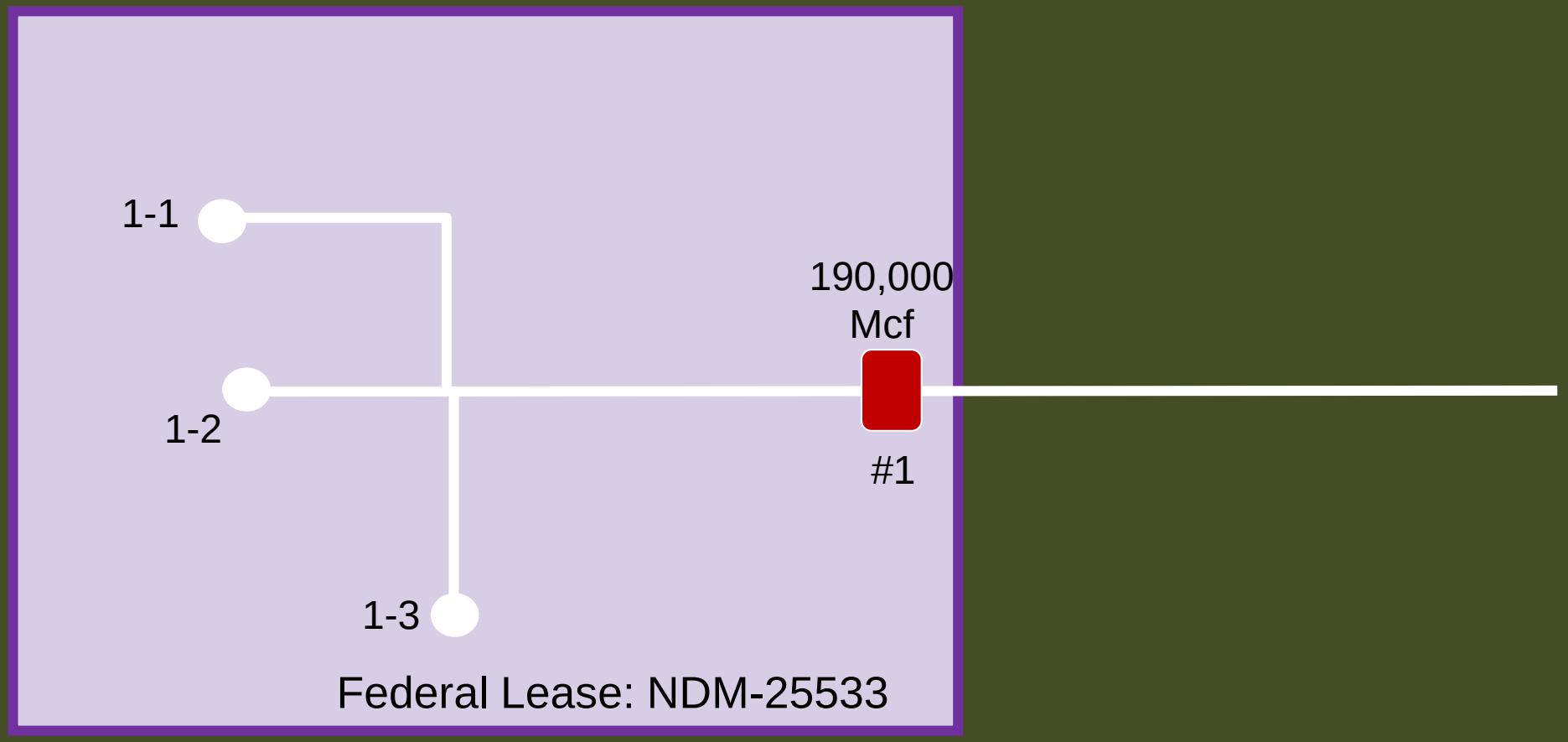


What is/are the Point(s) of Measurement? Operator determines

On what volume is royalty due? POM

Which meters must meet Onshore Order 5 standards? POM

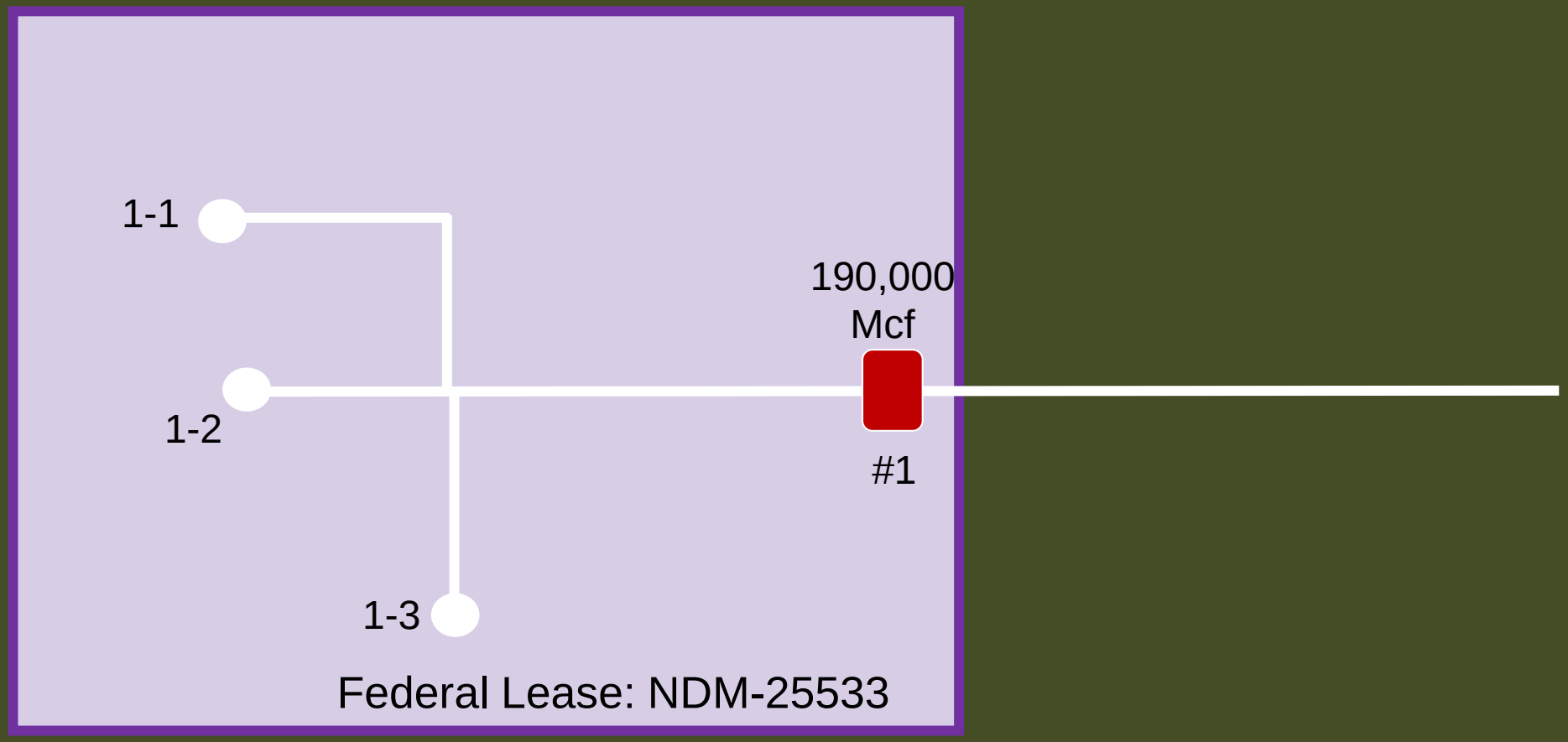
Approval required? No



What is/are the Point(s) of Measurement?

On what volume is royalty due?

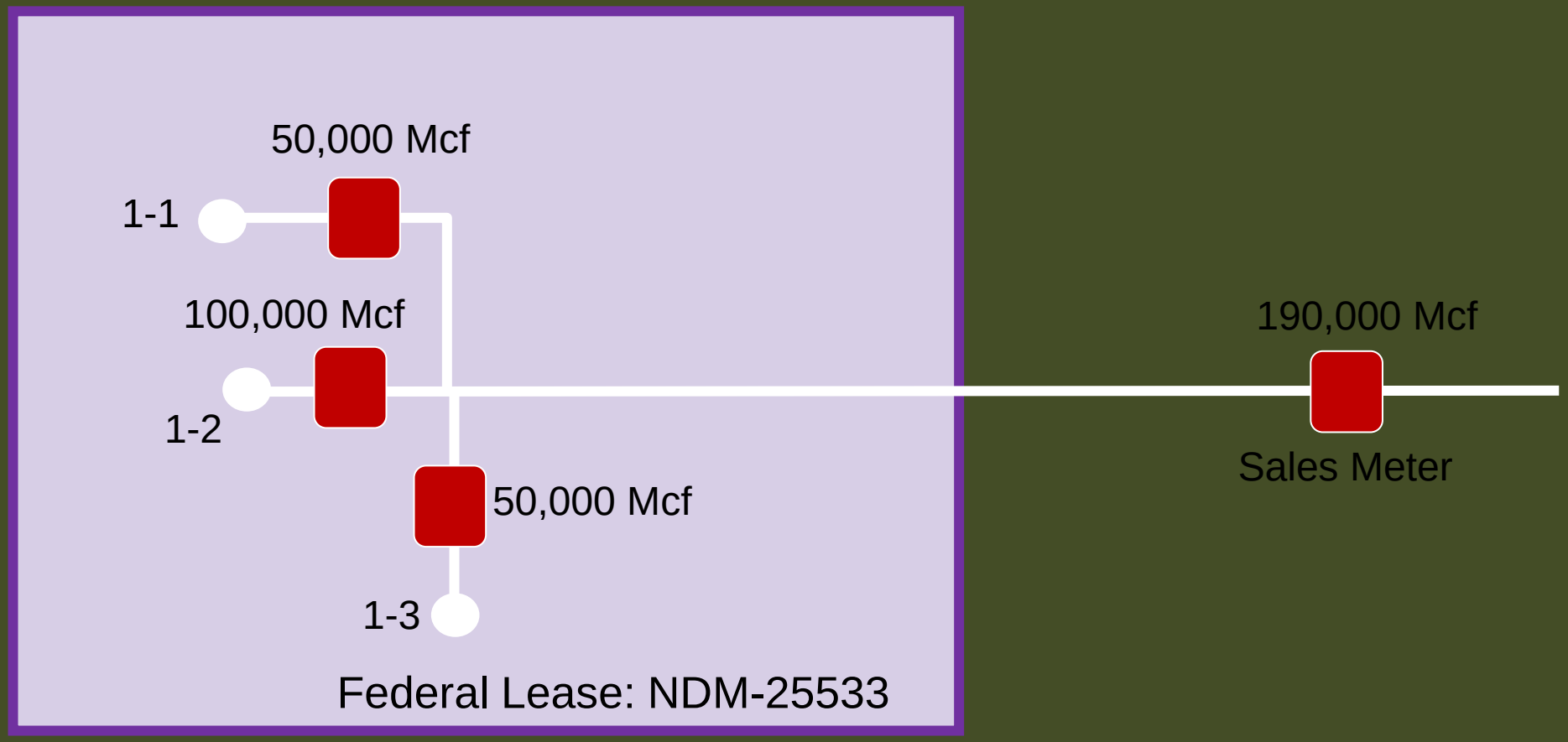
Which meters must meet Onshore Order 5 standards?



What is/are the Point(s) of Measurement? Meter #1

On what volume is royalty due? 190,000 Mcf

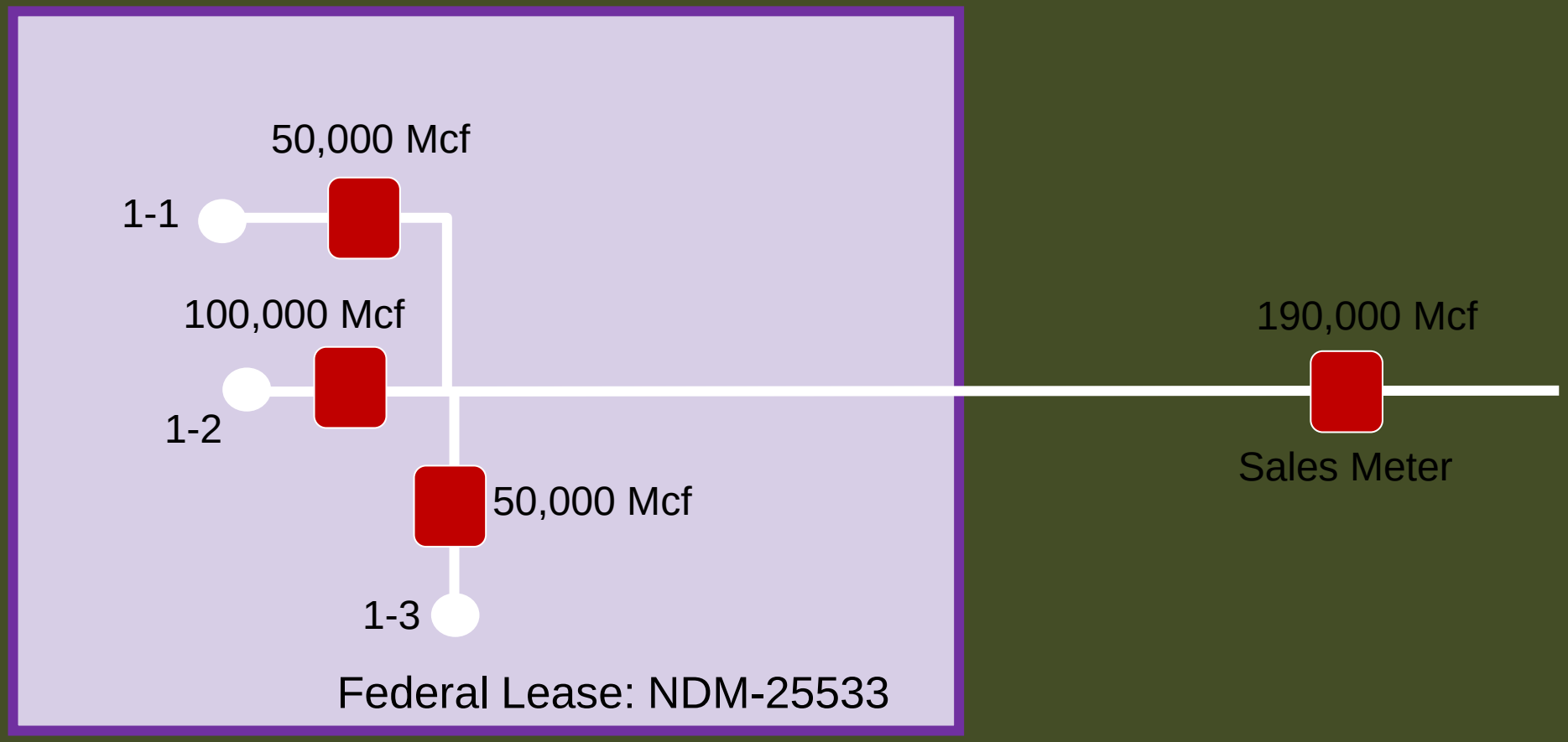
Which meters must meet Onshore Order 5 standards? Meter #1



What is/are the Point(s) of Measurement?

On what volume is royalty due?

Which meters must meet Onshore Order 5 standards?



What is/are the Point(s) of Measurement? **Wellhead meters**

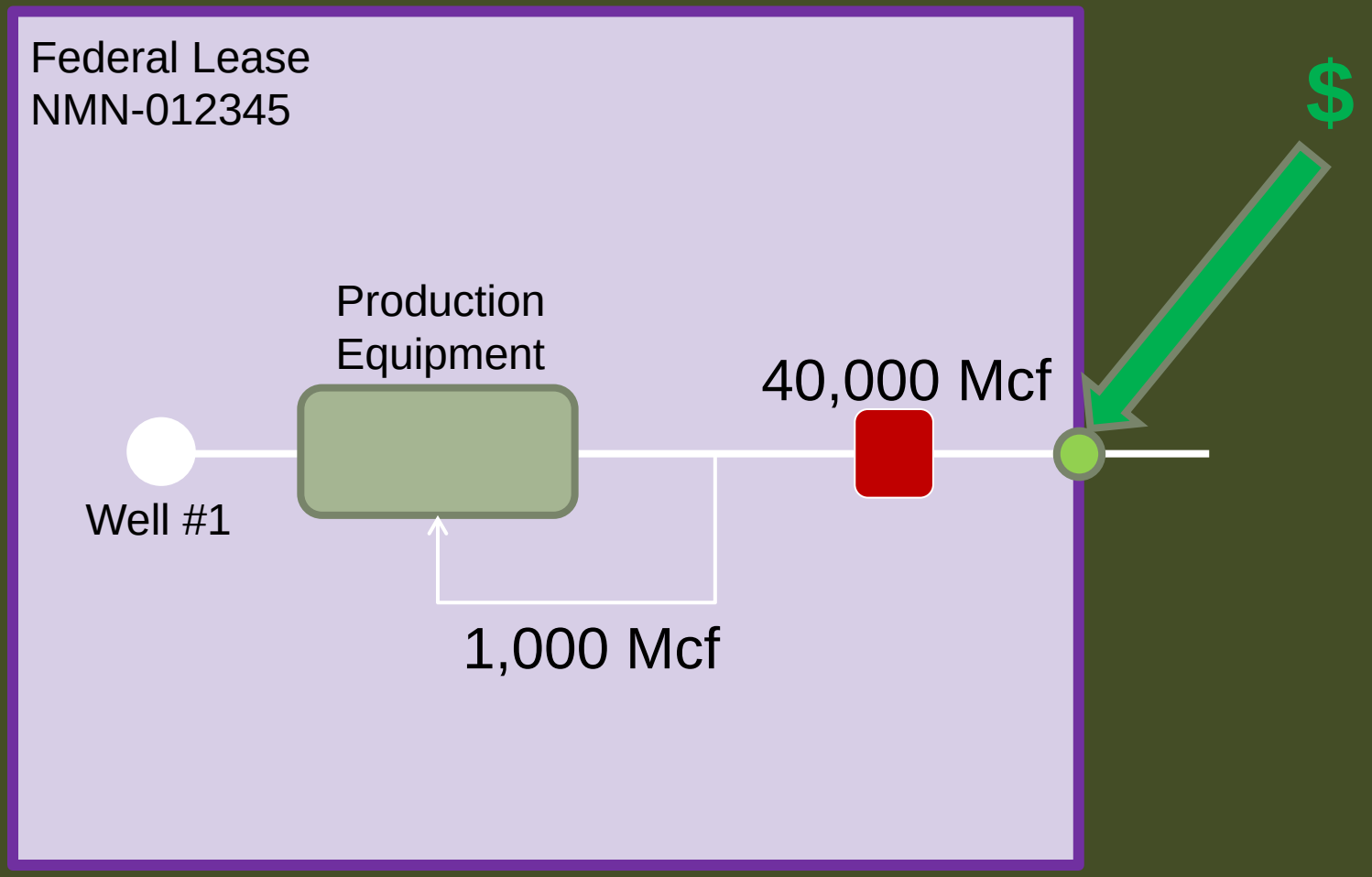
On what volume is royalty due? **200,000 Mcf**

Which meters must meet Onshore Order 5 standards? **Wellhead meters**

Using Sales meter as POM would require off-lease measurement approval from BLM

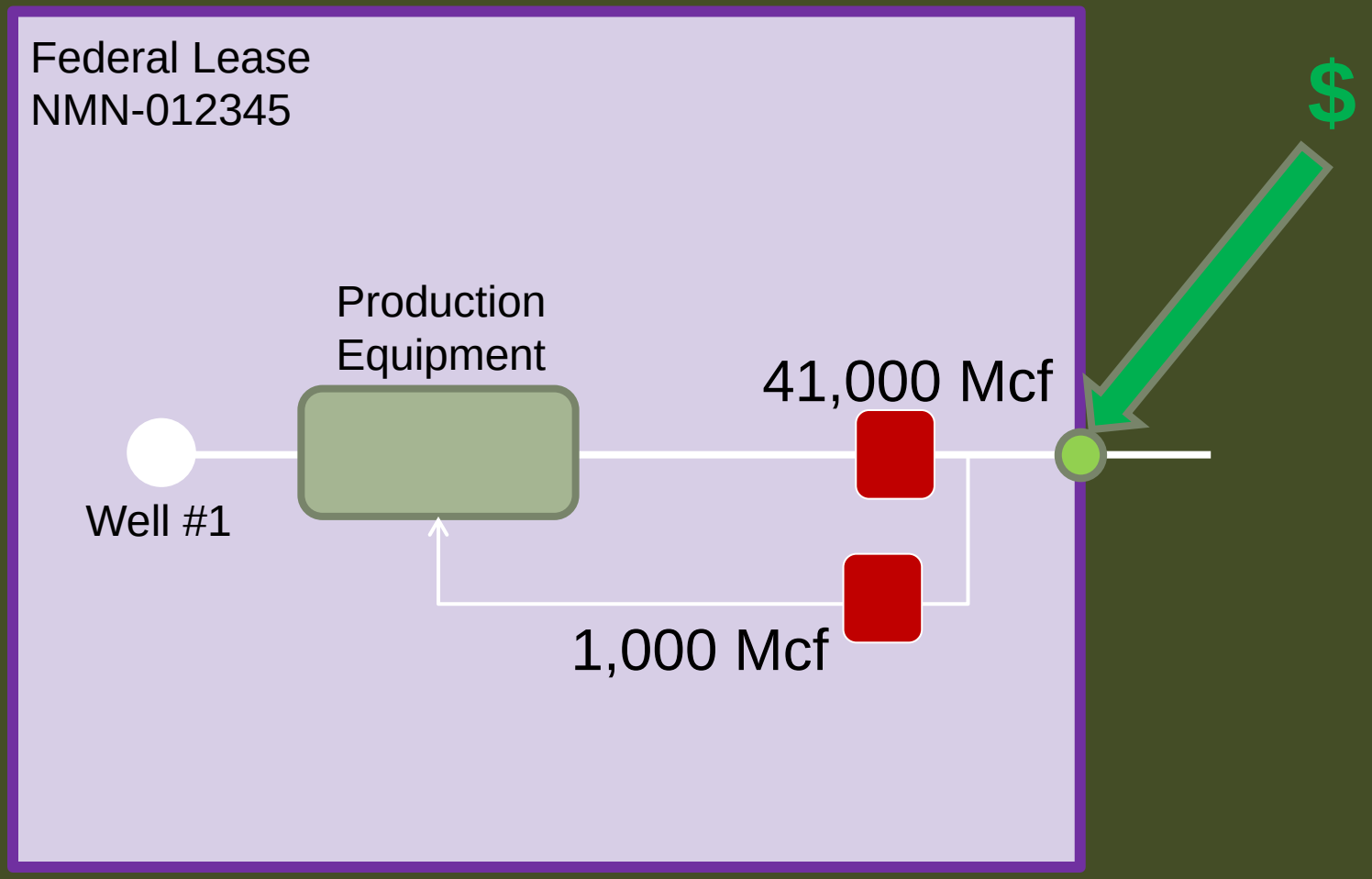
Where is royalty due?

Royalty is due on the amount or value of oil and gas removed or sold from the lease, CA, or unit



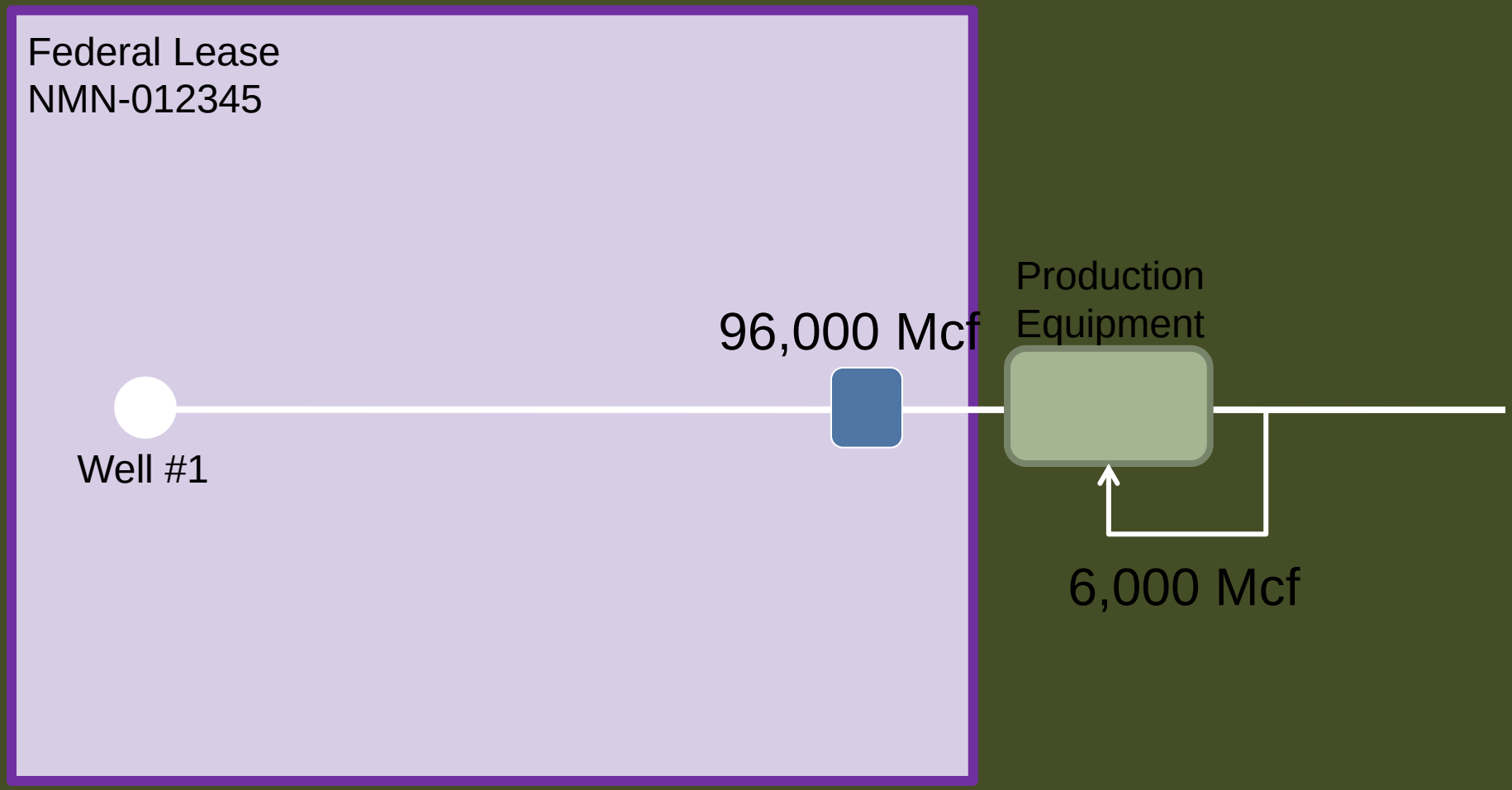
How much gas was removed from the lease?

No approval required



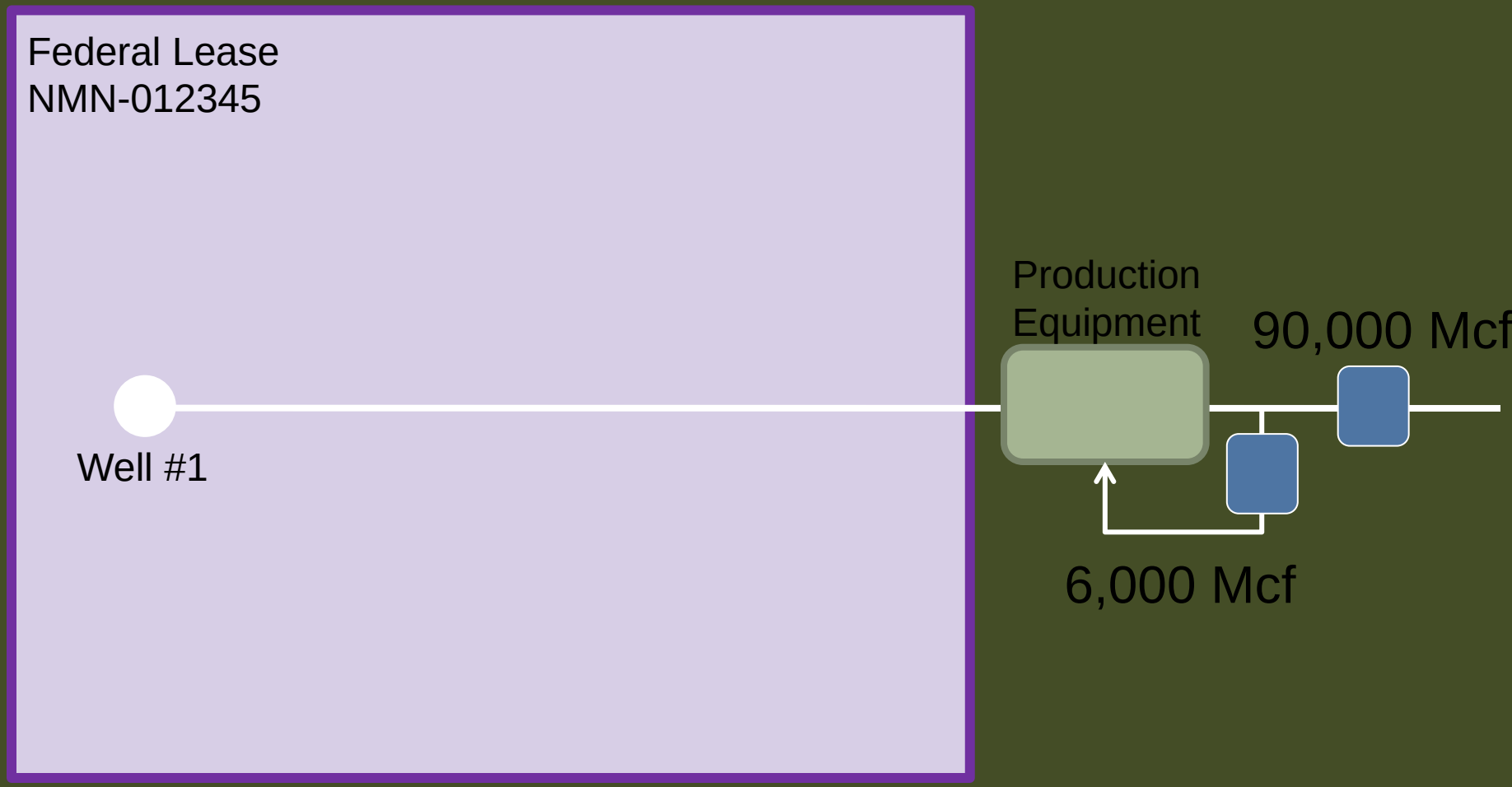
How much gas was removed from the lease?

No approval required



How much gas was removed from the lease?

OGOR B ‘01’ = 96,000 Mcf



How much gas was removed from the lease?

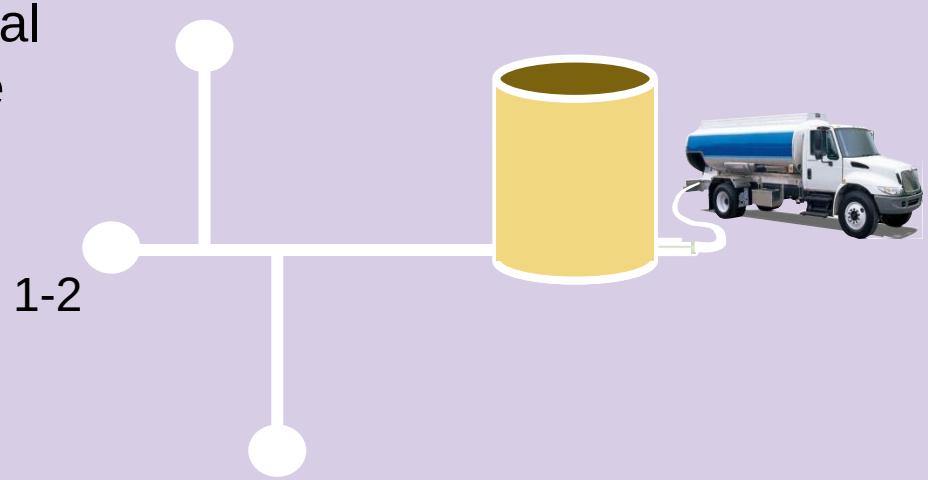
OGOR B ‘01’ = 96,000 Mcf

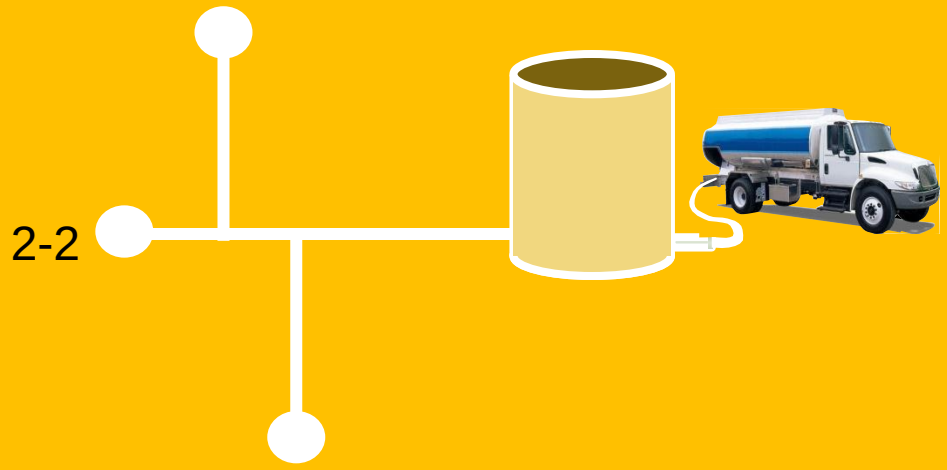
Commingling

Combining production from multiple leases, CAs, Participating Areas, or state/fee properties prior to royalty measurement

- Requires BLM approval
- IM 2013-152 prohibits approval of Federal or Indian properties with non-Federal or non-Indian properties

Federal Lease





Fee Lease

Federal Lease

1-2

Oil rate: 50 bpd

- Off-lease measurement approval
- Commingling approval
  - Would not be approved under IM 2013-152

Fee Lease

Federal
Lease

1-2

- Commingling approval
  - Could be approved under IM 2013-152
- Off-lease measurement approval

Federal Lease

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Avoidably Lost – venting or flaring without authorization and the loss has been determined as a result of:
    - ✓ Negligence
    - ✓ Failure to prevent or control the loss
    - ✓ Failure to fully comply with regulations and policy, provisions in approved plans (APD), or prior written orders

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Beneficial purposes– production used on or for the benefit of that same lease, same CA, or same unitized participating areas for operating or production purposes such as:
    - ✓ Fuel in lifting oil or gas
    - ✓ Fuel for heater treaters
    - ✓ Fuel for compressing gas
    - ✓ Fuel for drilling rig engines

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Unavoidably lost production means:
    - ✓ Gas vapors released from storage tanks
    - ✓ Gas released from low pressure production vessels
    - ✓ Oil or gas lost because of line failures, equipment malfunctions, blowout, fires, etc.
    - ✓ Venting /flaring in accordance with Section III

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Authorized venting and flaring of gas:
    - ✓ Emergencies – limited to 24 hours per incident and to 144 hours cumulative for the month
    - ✓ Well purging and evaluation tests – during unloading or clean-up of a well, not to exceed a period of 24-hours
    - ✓ Initial production tests – Initial well test not to exceed 30 days or 50 MMCF, whichever is 1st
    - ✓ Routine or special well tests

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Contents of the application to vent or flare:
    - ✓ Engineering, geologic and economic data
    - ✓ Estimated volumes
    - ✓ Total leasehold production, including both oil and gas, as well as the economics of a field wide plan

Royalty or Compensation for Oil and Gas Lost

- **NTL-4A**
  - Reporting
    - ✓ Reported vented/flared on OGOR B – code 21
    - ✓ Report beneficial use on OGOR B – code 20
  - Measurement
    - ✓ In accordance with the requirements in the application section

Federal Implementation Plan for Oil and Natural Gas Production Facilities, Fort Berthold Indian Reservation

The FBIR Oil and Natural Gas Production FIP requires owners and operators of oil and natural gas production facilities to reduce emissions of volatile organic compounds emanating from well completions, recompletions, and production and storage operations.

The Federal Register notice of the final rule is accessible online at: https://federalregister.gov/a/2013-05666.

Royalty or Compensation for Oil and Gas Lost

Bottom Line

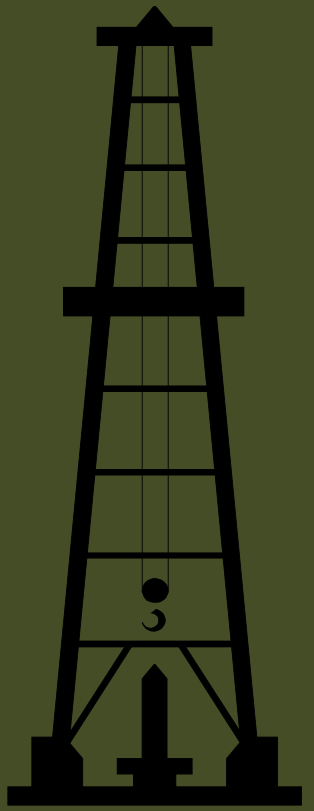
Operator's should strive to eliminate all vented or flared volumes by implementing Best Management Practices

Oil and Gas Operations Report

- When to file
- What needs reported
- OGOR A, B, and C
- Appendices
- Disposition Codes
- Gas and Oil Reporting
- Adjustment Reasons
- Take Home Items

The OGOR is used for Onshore oil and gas

- to report **ALL** operations
- of a lease/agreement
- for a production month.



When do you report wells?

- Begin when well completed, not in drilling status, even if it's not producing
- wells not permanently abandoned,
- inventory that needs to be disposed

What is filing timeframe?

- By 4:00 p.m.
- The 15th day
- of the second month following the production month.

I.E. Production March 1-31st
Report due = May 15th

What needs to be reported?

- Each individual well/completion (Except DRG, or P&A)

  - **All production**
  - **All injection**
  - **All sales**
  - **All Inventory**

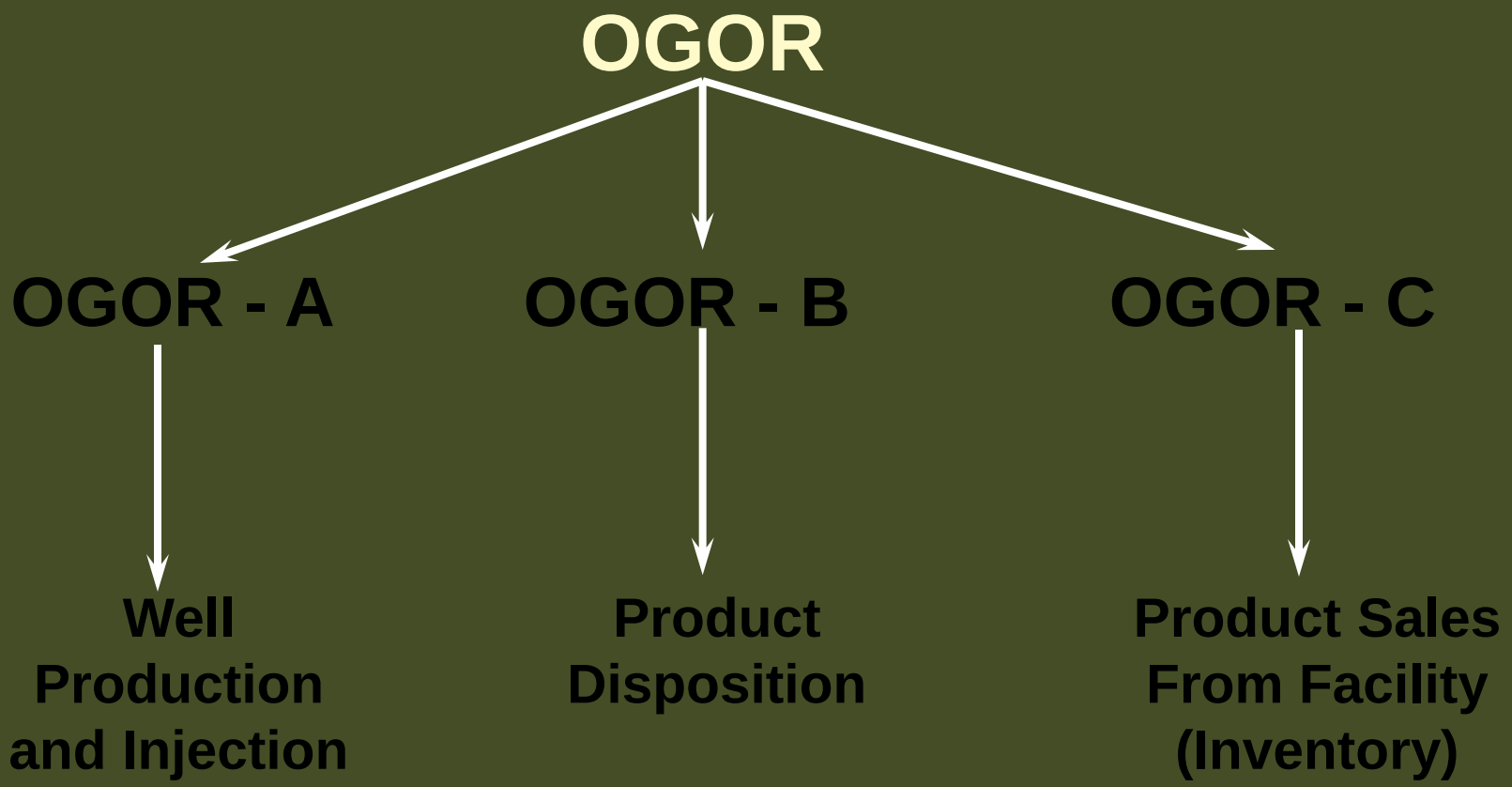
"ALL"

- **Means <u>TOTAL</u>**
  - **Production,**
  - **Beneficial use**
  - **Flared volumes**
  - **Injection,**
  - **Sales,**
  - **Inventory**

OGOR - parts

- Three sections (actually 4)
  - OGOR A
  - OGOR B
  - OGOR C
  - OGOR D - BLM only

OGOR
Report Overview



Oil and Gas Operations Report Relationship Between Parts

OGOR - A

Production

WELL	OIL	GAS	WATER
1	20	80	10
2	20	80	10
3	10	50	5
TOTAL	50	210	25

Volumes reported as produced on OGOR-A

EQUAL

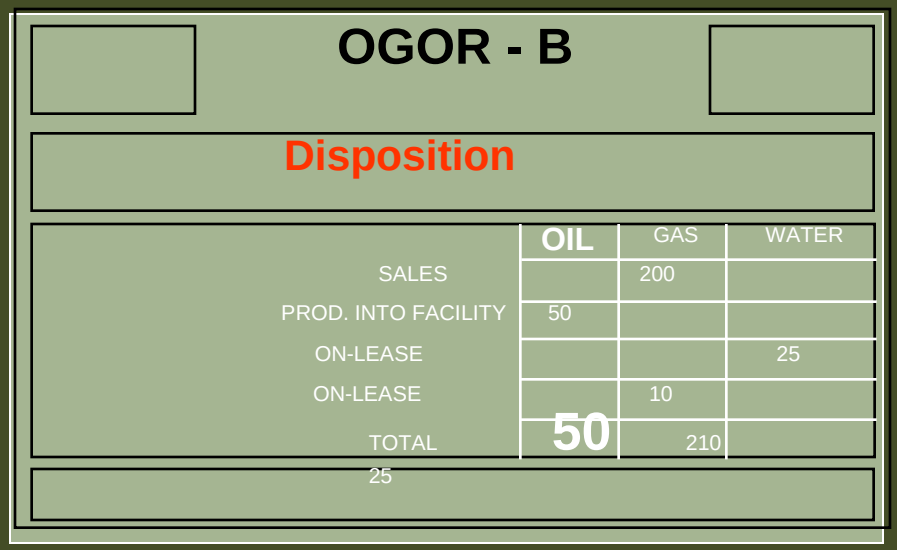
OGOR - B

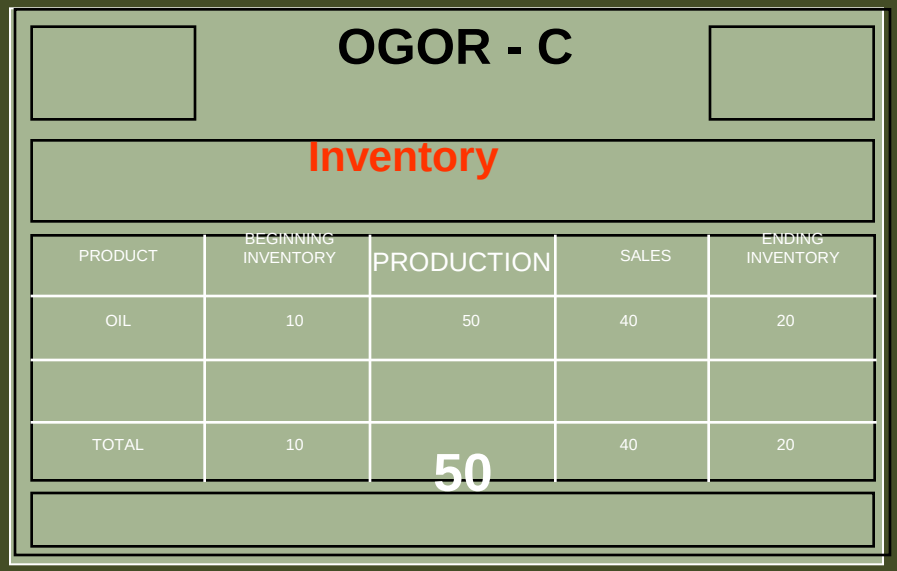
Disposition

	OIL	GAS	WATER
SALES		200	
PROD. INTO FACILITY	50		
ON-LEASE			25
ON-LEASE		10	
TOTAL	50	210	25

volumes reported as disposed on OGOR-B.

Oil and Gas Operations Report Relationship Between Parts





Volumes reported as produced into a facility (prior to sale Code 10) on OGOR-B

Equal

Production volumes on OGOR-C.

Appendix(s)

- **Totally** necessary to understand OGOR forms

OGOR CODES

- Appendix F - OGOR A
- Appendix G – OGOR A
- Appendix H – OGOR A
- Appendix I - OGOR B
- Appendix I & L - OGOR C

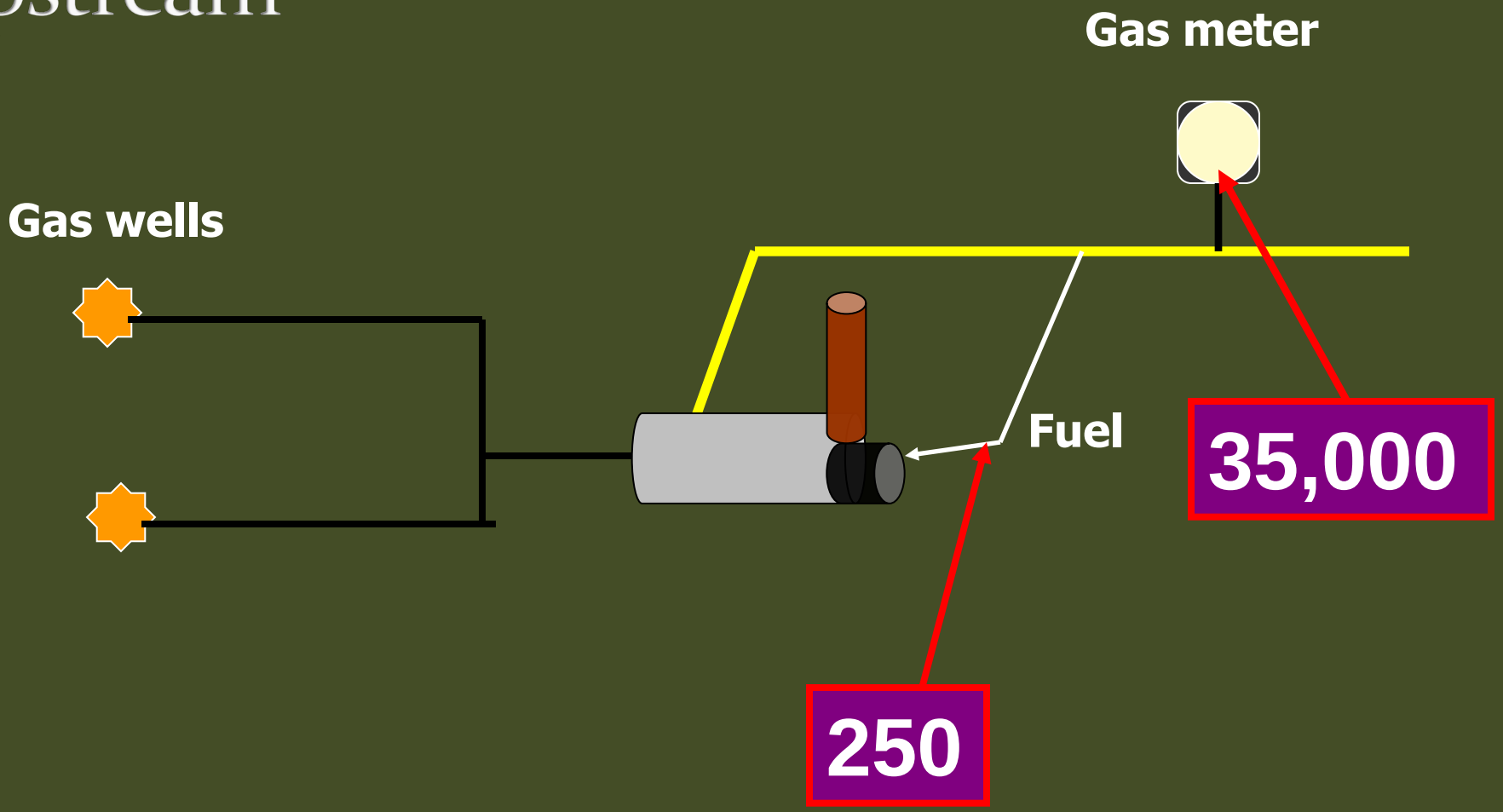
"APPENDIX I"

- Disposition Codes – OGOR B
  - These are **VERY** important to BLM

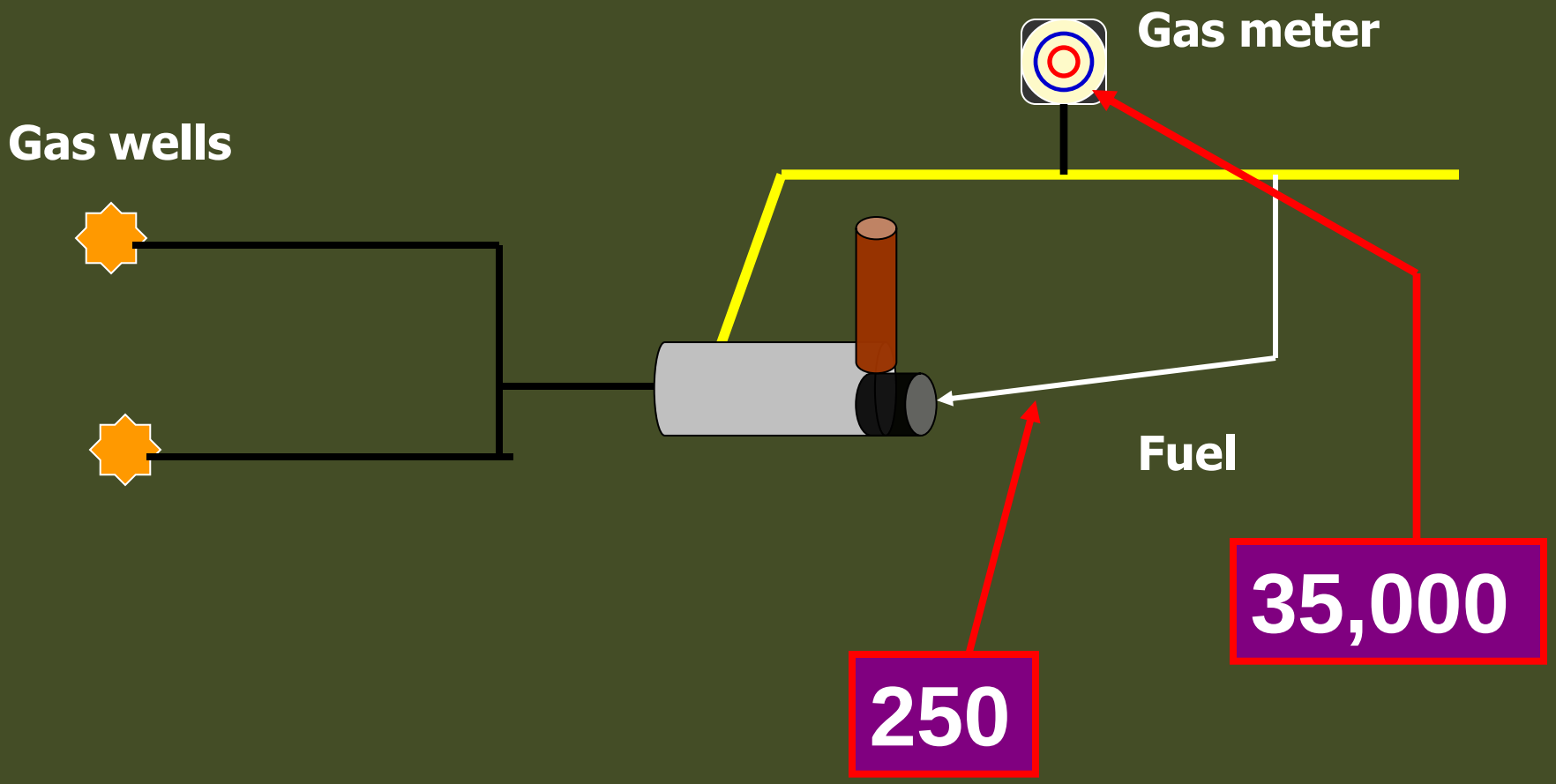
Some Common Disposition Codes

- Oil – 10
- Gas – 01 or 11
- Used on lease – 20
- Flared – 21, 22
- Vented - 61, 62

Gas Fuel Use on Lease Upstream



Gas Fuel Use on Lease Downstream



OGOR-B Detail Information

Metering Point *

Gas Plant *

API Gravity/BTU ***

LINE NUMBER	ACTION CODE (1)	DISPOSITION CODE (4)	METERING POINT (11)	GAS PLANT (11)	API GRAVITY 99.9 (3)	BTU 9999 (4)	DISPOSITION VOLUMES		
							OIL/CONDENSATE (BBL) (9)	GAS (MCF) (9)	WATER (BBL) (9)
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
					TOTAL DISPOSITIONS (10)				

BTU only on sales

Remember, Disposition 10 "Produced into Facility" must equal "Production" on OGOR-C

OGOR-B totals must match OGOR-A totals.

Notes about BTU

- Must be at 14.73 psi and 60° F
- Must be the dry gas basis
- If there are more than one well, report a volume weighted average.

Special Notes: Gas Reporting

- No inventory, therefore no OGOR C
- Gas may be transferred or sold
- Beneficial use and flaring must be reported
- BTU for sales/transfers – dry and weighted average

OGOR C – INVENTORY and OIL SALES

- **Tracks Oil/Condensate Inventory in storage**

- **Tracks Oil/Condensate Sales**

Special Notes: OGOR B & C

- Oil production and sales should be filled out on **OGOR C**, **prior to OGOR B**
- Production calculated on **OGOR C**
- Then carry it back to OGOR B Disposition Code 10

OGOR-C Detail Information

OIL & CONDENSATE ONLY!

PRODUCTION

LINE NUMBER	ACTION CODE (1)	PRODUCT CODE (2)	INVENTORY STORAGE POINT NUMBER (11)	METERING POINT (11)	API GRAVITY /BTU (5)	BEGINNING INVENTORY (9)	PRODUCTION (9)	SALES (9)	ADJUSTMENTS CODE (4)	ADJUSTMENTS VOLUME (9)	ENDING INVENTORY (9)
1						1000	650	1200			450
2											
3											
4											
5											
6											
7											
8											
9											
10											
				TOTALS (10)							

Sales + End Inv - Beg Inv = Production

Production must equal Disposition code 10 on OGOR-B

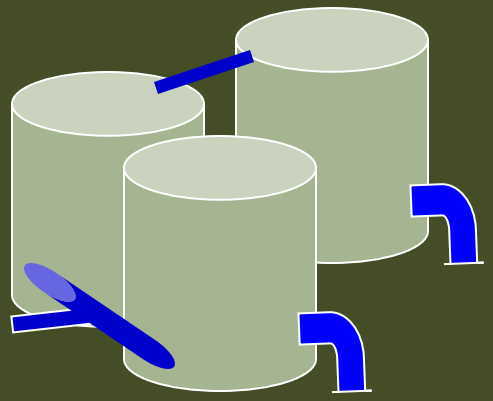
Sales + End Inv - Beg Inv = Production

Data needed for OGOR C

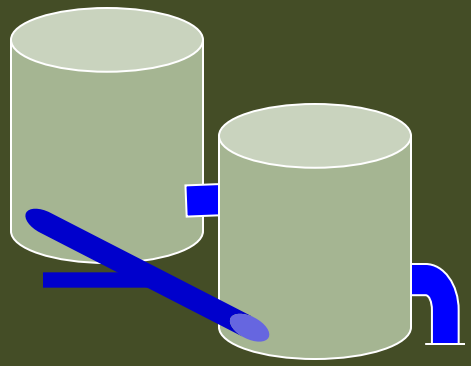
- End of month Inventory – Gauge Sheet/Pumper's Log
  - Gross volume, total for all batteries
- Sales statement/Run ticket total
  - Netted volume, total sales for the reporting month
- Beginning month Inventory = Previous months' ending

Important Note

- **Remember PRODUCTION on OGOR C is a balancing volume**

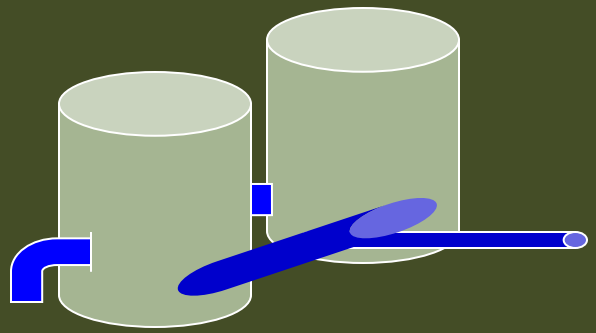


500bbls sales
API 46.6°



500bbls sales
API 48.5°

200bbls sales API
48.2°



TOTALS for Lease

Sales =

Wt AVG API =

3 separate batteries on Lease NDM 345678

OGOR-C Detail Information

OIL & CONDENSATE ONLY!

API Gravity

LINE NUMBER	ACTION CODE (1)	PRODUCT CODE (2)	INVENTORY STORAGE POINT NUMBER (11)	METERING POINT (11)	API GRAVITY /BTU (5)	BEGINNING INVENTORY (9)	PRODUCTION (9)	SALES (9)	ADJUSTMENTS		ENDING INVENTORY (9)
									CODE (4)	VOLUME (9)	
1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
					TOTALS (10)						

Volume weighted average

Adjustment Reasons

- Water draw or sediment removal – 32
- Spilled or lost – 23
  - must have a BLM or ONRR determination of unavoidably lost
- Differences/Adjustments – 42
  - BLM usually will want an explanation
  - Rounding when there are several wells on a case
  - Not a balancing figure

Special Notes: Oil Reporting

- Rarely have used on lease fuel oil
- API gravity on sold volumes – weighted average
- Hot oil use
- Load oil brought onto lease
- Gross production vs. net sales.

In Closing

- The ultimate goal of I & E is to ensure that the OGOR volumes are accurate
  - The field side of I&E ensures that specific measurement and site security requirements are followed
  - The records reviews ensure that operator documentation is adequate and OGORs are accurate
  - The Big Four: BLM POM, measurement accuracy, site security, and OGOR reporting

New/Revised Onshore Orders

Onshore Order 3, 4, and 5

- Internal review (9/2013)
- OMB (10/2013 – 12/2013)
- **Published as draft for comment (3/2014 – 5/2014)**
- Review comments and revise (8/2014)
- Internal review (9/2014 – 11/2014)
- OMB (11/2014 – 2/2015)
- **Publish as final (3/2015)**

Websites

Onshore Orders, Regulations, NTLs

www.mt.blm.gov

⊞ What We Do

Energy ⇨ Operations

Uncertainty Calculator

www.ceesi.com/UncertaintyCalculator.apx

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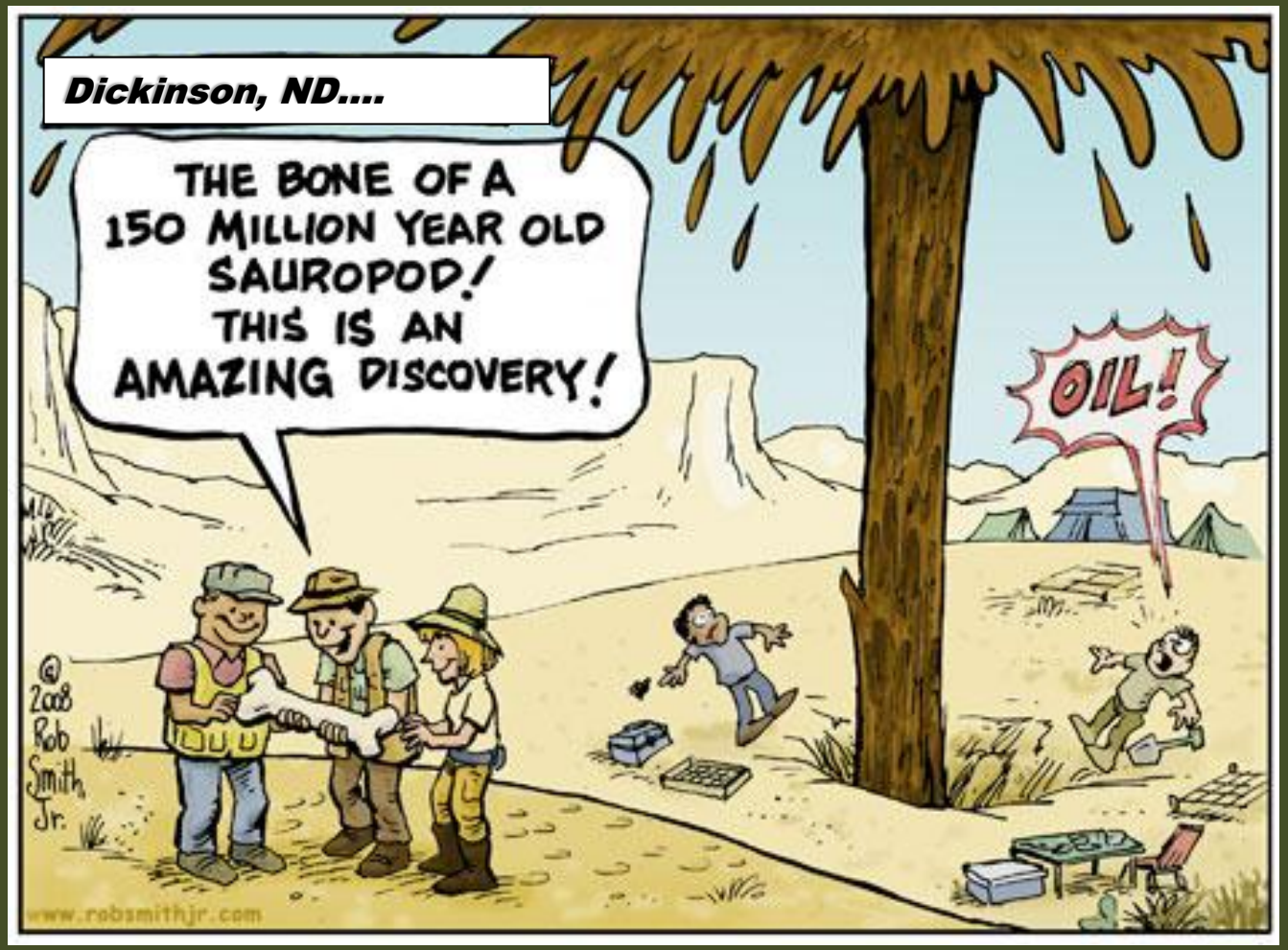
Jim Albano: (406) 896-5111; jalbano@blm.gov

QUESTIONS?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THE BONE OF A 150 MILLION YEAR OLD SAUROPOD! THIS IS AN AMAZING DISCOVERY!
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